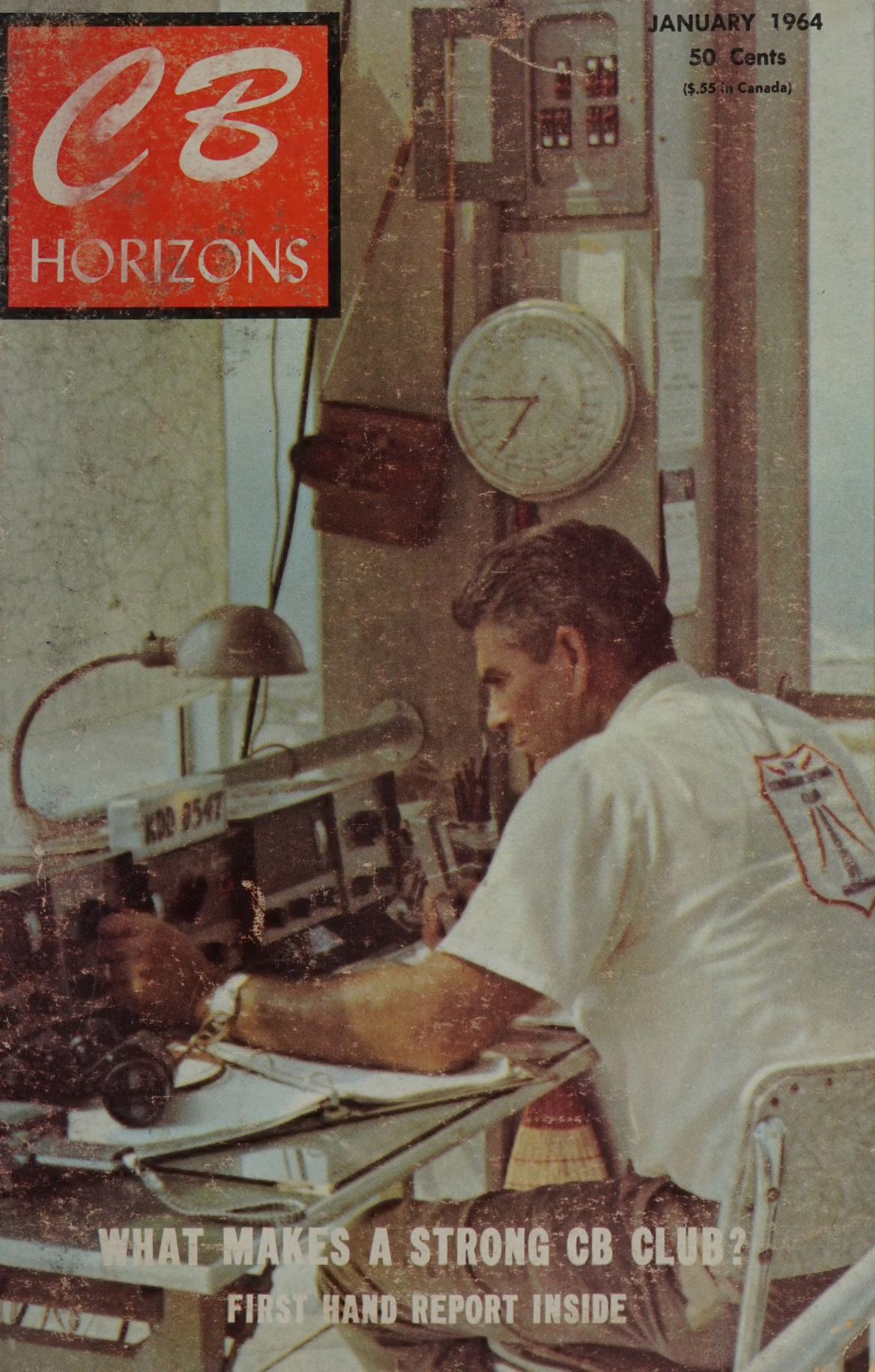
CB HORIZONS

JANUARY 1964
50 Cents
($.55 in Canada)



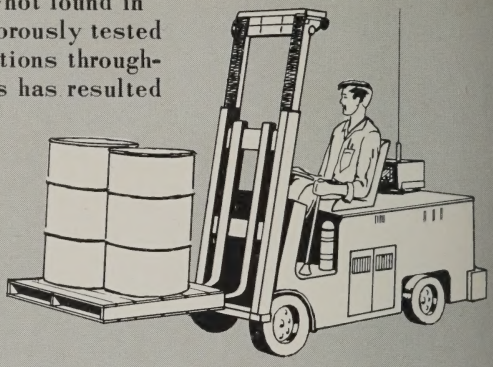
WHAT MAKES A STRONG CB CLUB?

FIRST HAND REPORT INSIDE

GENERAL VS-2 - VS-3

Industrial 11 meter 2-way radiotelephone!!

Here is a two-way radio with the power and stamina to meet every Citizens Band communication requirement! General's remarkable VS-2 is the most advanced set in its field and contains many features not found in low cost equipment. The VS-2 was rigorously tested under extremely severe operating conditions throughout all stages of its development. This has resulted in the construction of a superb transceiver which is second to none in rugged dependability - AND - at the lowest cost in the industry!!



$139.95

Highlight Features: 15 Watt Construction;* Vibration Rated Service; transistorized power with automatic short circuit protection; electronic switching - eliminates relay problems; microphone with coil cord and moisture proof cartridge; 12V and 115V operation (Model VS-3 operates from 6V or 115V power source).

Farmers
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Government Agencies
Emergency Equipment
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Plumbers
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Boating
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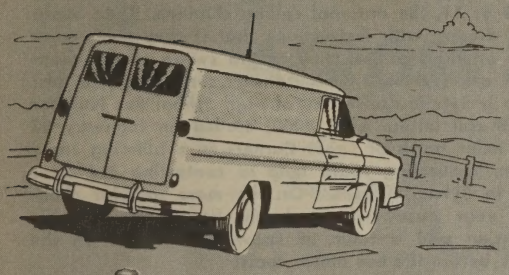
Surveyors
Oil Fields
Lumber Industry
Office
Warehouse
Yard
Paging

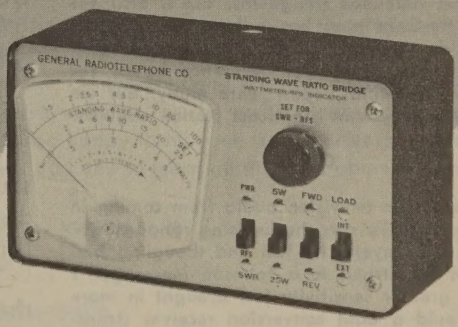
free! FCC license form 505. Write to "General" TODAY!!

*Under Present Rules Part 19.32 The FCC Does Not Provide For More Than Five (5) Watt Input In The Citizens Radio Service (26.965-27.285 Mc Band).

Versatility to meet the Citizen Band communication requirements of Today and Tomorrow is yours with General's powerful, rugged, and dependable VS-2 and VS-3!

Small and compact, the VS-2 is easily installed in all types of equipment including jeeps, fork lifts, tractors, boats, combines, and many others. Using General's "Snap-Rak" installation, the VS-2 may be moved from vehicle to vehicle in just seconds. The VS-2 provides the operator with simple, efficient 2-way communications. Just press the mike button and You're "on the air" with one of General's totally new concepts in 2-way communications! See this outstanding two-way radio at your General Dealer's TODAY!!





MH-6 "Weather-Rak"

The MH-6 is an all new housing assembly for outdoor protection of General's VS-2 (shown installed). The MH-6 insures instant, reliable, and continuous communication in wind, sand, rain, or snow! Weather resistant black finish.

...$29.95

615-B Multifunction Bridge

Complete transmitter/antenna system analysis! The 615-B is a precision instrument that measures true power, standing wave ratio, and relative field strength. For use with any transceiver in the 27 MC to 54 MC range.

...$39.95

win! FREE CB EQUIPMENT EVERY MONTH!!
See insert card in back of this issue.

10% Down! Up to 3 years to pay!
See your General Dealer TODAY!

November Winner of General's Drawing
Jim Mitsenga, KGI5645
2303 South Kings
Springfield, Missouri

GENERAL
RADIOTELEPHONE COMPANY

3501 West Burbank Boulevard, Burbank, California
Phone: 849-6891 Area Code: 213

OZZIE'S MAIL-BOX

Ozzie —

Please send me information on what book the information concerning phasing vertical antennas, such as the CLR, was obtained in. I want to know more about this method of getting antenna gain.

James Coffer
Hames TV and CB Service
Temple, Oklahoma

Jim:

The May issue of CB Horizons carried the report on phasing vertical antennas (Magnums, CLR's, etc.) for added gain. Hy-Gain now has a box they call the Co-Phaser which eliminates much of the headache of installing such a system. Our reference books for preparation of the initial report were many, but we refer you to any good AM broadcast station engineer for the full story.

Ozzie

Dear Ozzie —

How does one stop television audio from coming in on the CB set. It really cuts the listening range down. At first I had a Lafayette HE-15B and thought I had troubles. Then I switched to a Johnson Messenger 1 and this set's greater sensitivity just brought in more TV audio. Would a dual conversion receiver (transceiver) cure the problem? Help!

Clarence F. Crosby
802 Missouri Avenue
Weslaco, Texas

Clarence:

Chances are the TV sets giving you so much grief are the older "21 megacycle i.f." sets produced prior to approximately 1954. A set with a 21 megacycle i.f. usually has the audio in the i.f. around 27 megacycles. Now the i.f. in the video receiver is supposed to operate at very low levels, hardly a level commensurate with a transmitter. But these older sets frequently radiate well beyond their cabinets in the i.f. deparment and when they radiate TV audio on 27 megacycles, or close to it, it's right on 11 meters. There is not one thing you can do at your CB receiver to trap it out, for trapping out the TV audio at 27 megs will also trap out the 27 meg CB signals. Your only recourse is to go to the neighbors and request that they put a Drake TV-300HP (high pass) filter on their sets to keep the 27 megacycle audio from feeding back up the twinlead to the antenna, and into your receiver. All TV receiver radiation (including the stuff you are complaining about) is covered under the Part 15 Incidential Radiation restrictions of the Commission. And from what you describe, you have a few illegal Part 15 sets in your area!

Ozzie

Ozzie —

We have five CB units in our school buses and find them to be quite satisfactory. A question: What is the procedure in case of an emergency with one of our buses if the operator is not able to contact the base station? What procedure should be used to contact anyone who might be listening and could relay, or be of help?

John W. Harper, Principal
Sylvia Rural High School
Sylvia, Kansas

John:

Chances are you are using a CB channel not in general use in your area by other radio users. If you have multiple channel sets, equip the units with channel 9 or 11, the national calling channels. Then equip your drivers with instructions that if they can't raise base on the mobiles, they are to switch to the channel 9 or 11 crystals, and transmit something like this: "This is Sylvia, Kansas Rural High School Bus Number 5, CB call letters KGH 0000, stalled on highway 33 two miles north of Cross Corners in a blinding snow storm, requesting radio help in contacting our base unit in Sylvia, Kansas." On the more popular channels your buses will probably arouse considerable attention and a team of snow-cats will be on the scene before the bus motor cools!

Ozzie

OUR COVER

The Dixie Monitor, KDD0547, Stone Mountain, Georgia.

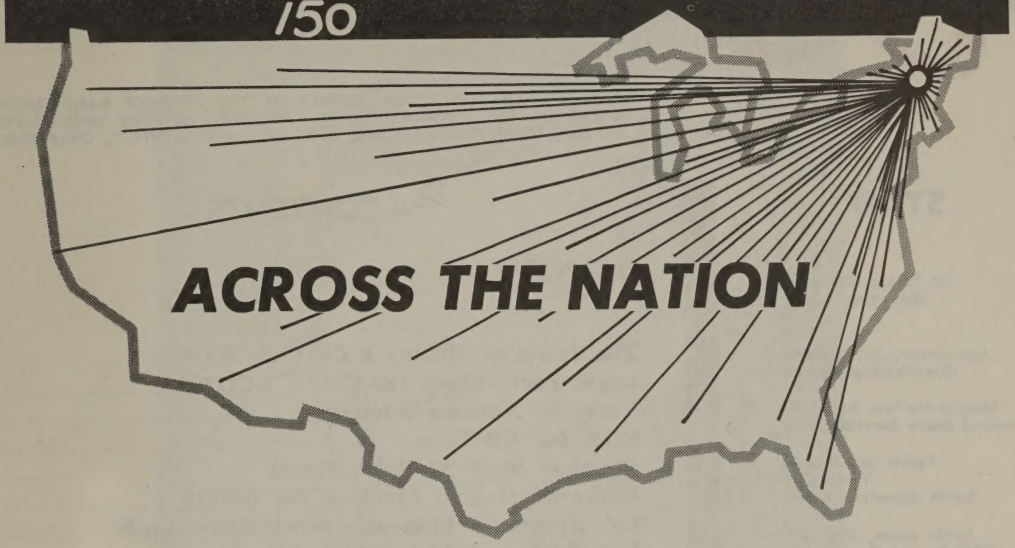
Located 17 miles from the sky-line of downtown Atlanta, this 24-hour Channel 15 monitor, equipped with Browning base station equipment, scans the airwaves for distress calls and relays emergency messages throughout north and central Georgia.

The Dixie Monitor is a club project of the Dixie Communications Club, Decatur. Staffed by volunteer "Duty Watch Officers," the Dixie Monitor has proved its service invaluable in the approximately nine months it has been operating serving a 100 mile radius from its 900 foot above average terrain vantage point.

Duty Watch Officer Mel Welch, KDB-0264, is shown on our cover keeping a constant vigil for any calls for assistance or information that the Monitor may intercept.

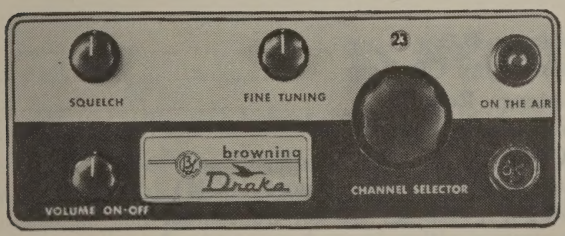
The photo and story, incidentally, is our first "Cover Story Winner" in the contest sponsored by **CB Horizons** in connection with our four color covers. CB Clubs interested in placing their club's efforts on the front cover of CBH are urged to check page 48 of the September 1963 issue, or drop a note to Managing Editor Pat Pogue for the full entry details.

BROWNING CB EQUIPMENT NOW AVAILABLE AT MORE THAN ~~100~~ 150 FRANCHISED SERVICE CENTERS



Browning Service Centers are operated by conscientious people who have a sincere interest in Citizens Band Radio. They are at your service to provide you with spare parts, repairs and Browning equipment sales. We invite you to visit your Browning Service Center soon and see the complete line of CB base station and mobile equipment on display. *Please write us for the name of the one nearest you.* If there is no Service Center in your area, we will be happy to fill your requests direct from the factory. Remember: Investigate before you invest. It will pay you to learn all the facts about Browning before you buy any CB radio equipment!

Don't settle for anything but the best . . . insist on BROWNING, now manufacturing the nation's most complete line of CB transmitters and receivers!



New Browning Drake M-523
all-channel CB mobile transceiver.
Actual Size: 8" x 9" x 3" small

Mail Coupon Today

browning
LABORATORIES, INC.
LACONIA, NEW HAMPSHIRE

Browning Laboratories, Inc., Dept. H
100 Union Ave., Laconia, N.H.
WITHOUT OBLIGATION, PLEASE SEND:

- ☐ Name of nearest Service Center.
- ☐ 16-page color CB catalog.
- ☐ Information on how to become a Browning Service Center operator.

NAME _____

ADDRESS _____

CITY _____ ZONE ___ STATE _____

CALL LETTERS _____

CB HORIZONS

JANUARY 1964

VOLUME 4 • NUMBER 1

PUBLISHED MONTHLY, ON BEHALF OF THE CITIZENS BAND RADIO USERS OF THE UNITED STATES AND THE WESTERN HEMISPHERE, BY HORIZONS PUBLICATIONS, INC., OKLAHOMA CITY 1, OKLAHOMA

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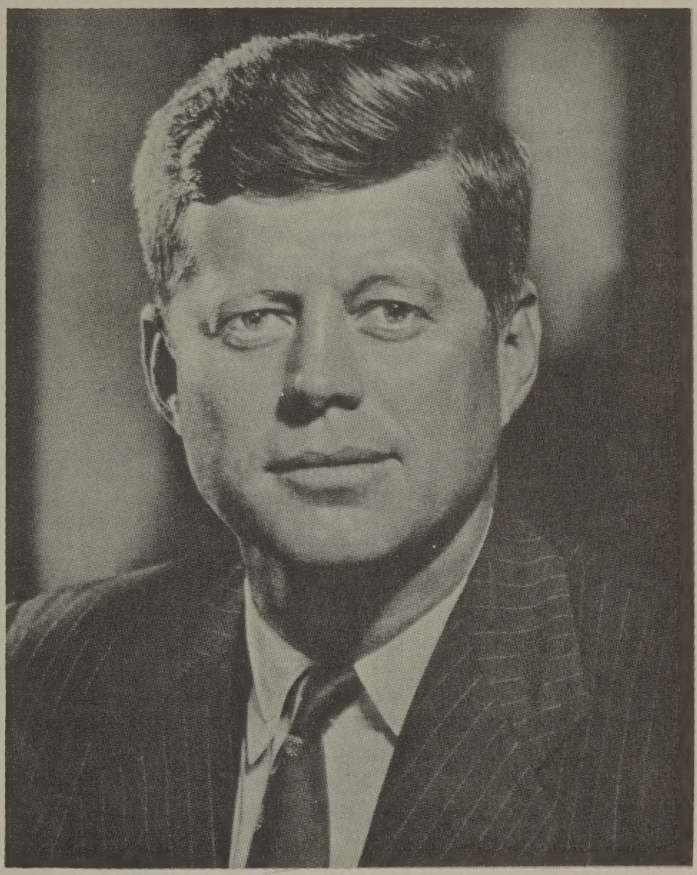

IN MEMORIAM

To the late John Fitzgerald Kennedy, 35th President of the United States of America, the publishers and staff of CB Horizons pay tribute. He was a champion of peace and good will; a courageous leader of freedom's forces in the world. The memory of John F. Kennedy, our beloved President, shall remain in the hearts of all of us.

CITIZENS COMMUNICATION MANAGERS FOR CB HORIZONS

Reports and volunteers invited: All readers of **CB Horizons** are invited to report individual, group or club meetings, events, drills, projects and gatherings to the CCM reporter serving your area. The CCM reporter in turn prepares his magazine copy for publication in **CB Horizons**. CB Clubs publishing papers are urged to place not only the CCM in your area on your mailing list, but also the CCM Project Coordinator, Miss Jamie Jones (**c/o CB Horizons, Box 1557, Oklahoma City 1, Oklahoma**), to receive the papers as issued. Photographs suitable for publication are also invited. Please allow from 30 to 45 days for items to appear in print. Plan ahead when announcing coming events, at least 60 days. In some areas of the country, CCM appointments are available. Write in care of Miss Jones if you are interested in reporting in **CB Horizons**. The mailing addresses of CCM reporters appear below.

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	*(Position vacant currently — send reports directly to CBH)		
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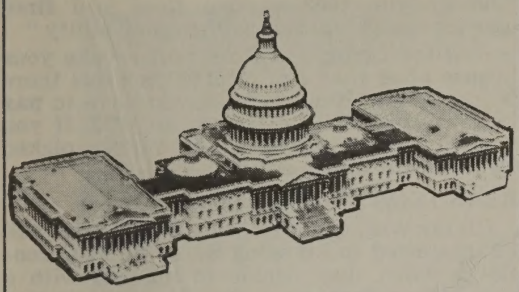
Dick Vernon	20Q 1468		Butler, Pennsylvania

Our Man in



Washington

The Electronics Division of the U.S. Commerce Department's Business & Defense Services Administration has released a bit of information concerning the impact of Japanese imported "two-way 27 megacycle, radios" on the U.S. CB scene.

The information, supplied to the Commerce Department by the Japanese Ministry of Finance, is assumed to be accurate and un-biased.

During the first half of 1962 Japan exported to the United States 53,000 "citizens band transceivers" (obviously hand-held units) with a total dollar value of $1,100,100, or slightly less than $21.00 per unit.

According to the best marketing sources, the introduction of 5 watt transceivers into the American market, from Japan, **did not begin** until the first half of 1963, and is not expected to show any substantial dollar volume before the completion of the current-second half of 1963.

FCC figures show that during the same "first half of 1962" when the U.S. imported 53,000 Japanese (hand-held) transceivers, the FCC was granting 54,680 CB licenses for Part 19 operation.

It is assumed that most Japanese hand-held units were sold to be operated as Part 15 units, not Part 19.

LICENSE REVOCATIONS

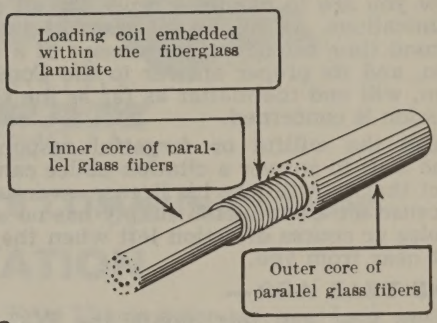
A startling number of CB licenses revoked by the FCC fall into a single categorical area of concern.

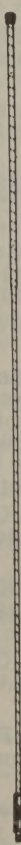
From a random sampling of such Commission actions in the past six months, the following reason is cited by the Commission for the final disposition (license revocation) of the cases involved.

Quoting from a typical FCC Docket concerning CB license revocation,

"4. The Official Notice of Violation, the follow-up letter and the Order to Show Cause were mailed to (the) respondent at his last known address. **No reply to such communications has been received.** The Commission's rules require that each licensee

Fiberglass
+
Process
=
THE DIFFERENCE


Loading coil embedded within the fiberglass laminate
Inner core of parallel glass fibers
Outer core of parallel glass fibers



Compare the Versatile VIP — STYLE 173 — with any other loaded antenna. The exclusive Columbia Products ALL FIBERGLASS construction builds in the rugged efficiency that makes the difference. The loading coil is embedded within the fiberglass laminate. There is no vinyl sheath to crack or craze.

The Columbia Products Company uses all fiberglass in a unique process to produce antennas of superior strength that withstand impact and flexing, hot weather and cold. Fiberglass also forms a natural barrier to precipitation static for improved reception . . . is non-corrosive and light weight.

Use the 4-ft. VIP for any frequency between 27 Mc. and 55 Mc. by simply trimming the tip with a fine tooth hacksaw or triangular file.

STYLE 173

COLUMBIA PRODUCTS COMPANY
SHAKESPEARE CO. SUBSIDIARY, COLUMBIA, S. C.

provide a mailing address where he can be reached, and that a licensee is chargeable with the receipt of official communications mailed to his last known address (section 1.56 and 1.57 of the Commission's rules)."

The key line is **No reply to such communications has been received.**

In most if not all cases the original communique from the Commission to the licensee was a relatively every-day Notice of Apparent Violation of Rules, or a so-called citation.

Merely ignoring a citation, hoping that it will go away if left un-answered, is not the answer!

The Commission expects and spells out how you are to handle a reply for all communications. In nearly all cases of first or second time offenders, the receipt of a citation, and its proper answer to the Commission, will end the matter as far as the Commission is concerned.

But the willful or forgetful respondent who fails to answer a citation notice can expect that he will lose his license, eventually, because the Commission simply has no other choice or course of action left when they do not hear from you.

ONE YEAR AGO —

One year ago this month the FCC was mailing out Show Cause orders to CB'ers who had repeatedly violated various sections of Part 19.

A typical October **1962** FCC release, concerning the subject of Show Cause orders, read like this:

"The Commission on October 11 (1962) directed Francis C. Baxter, Denver, Colorado to **show cause** why license for radio station 15Q 1314 in the Citizens Radio Service should not be revoked for rules violations, **and afforded hearing** (Docket 14798)."

A typical October **1963** FCC release reads a little differently:

"The Commission by its Safety and Special Radio Services Bureau in the period Sept. 26 to Oct. 1, served notice of apparent liability for forfeiture of $100. each on the following 4 Citizens Radio Service licensees for repeated and/or willful violation of the rules. .

Craig N. Kleinfield, Maywood, N. J., KBG 8570, (alleged) violations of Section 19.61 (a);

Don E. Bauman, Missouri City, Texas, KFD 1840, (alleged) violation of Section 19.61 (g);

Don H. Busby, Hillsboro, Oregon, KFG 0926, for (alleged) failure to respond to official notices;

Ronald C. Cameron, Fort Lauderdale, Fla., 7Q 1867, for (alleged) failure to respond to official notices."

Note that the 1963 version of the same apparent Commission actions can tag you for a $100. fine **without** an opportunity to show-cause why you should not be subject to the Commission's action **before** the action (the $100. fine) is taken.

You still have the opportunity to appeal the fine, asking for either a reduction, dismissal or adjustment, **but** unlike the 1962 version where you could show-cause why your license should not be revoked **before** the Commission took action (revoked your license), the 1963 version fines you **first,** and then says "prove you are not guilty."

And the Commission can still revoke your license after they fine you, if they feel there is just cause. Now, in 1963, you have to **pay** to get out of the ball game. In 1962, if you wanted to stop playing, you simply picked up your mit and went home.

REASON(S) FOR FINES

CB'ers with one or more past citations will be interested in knowing what the FCC considers when they decide to hit you with a fine rather than send just another citation notice.

Six CB'ers slapped with apparent liabilities for monetary forfeitures (i.e. fines) on a single day in late August had one thing in common. All were charged with violating 19.61 (a), or permissible communications.

Two CB'ers tagged early in September with $100. fine apparent liabillties were also snagged under 19.61 (a).

On September 13 the Commission served public notice on 9 CB'ers; one was charged with violating 19.61 (a) and fined with an apparent liability of $100. The other eight were slapped with apparent liabilities because they had neglected to answer Commission correspondence.

WHAT IF . . .

What if you should receive a notice of apparent liability?

You have 30 days to respond, and the outline for proper response is contained in the "apparent liability" letter you receive. Briefly, you can appeal; ask for an adjustment of the fine, or pay the fine. In almost any case, of the three, it's best that you see an attorney for some help, unless you simply decide to pay the fine. You won't need your attorney's help to pay the fine unless you want him to lend you the money!

FOR MANUFACTURERS ONLY

Ferris Instrument Company, Boonton, New Jersey, has a new precision piece of CB lab equipment that is designed to make transceiver check out on a production line a simpler way of life.

The Model 24D microvolter comes supplied with crystals for all 23 Class D channels, and up to 9 i.f. frequencies in the range 200 kc and 15 megacycles.

Each frequency is controlled by individual crystals.

Metered output, adjustable from 100,000 microvolts down to 0.1 microvolt, internal and external modulation, metered and adjustable from 0 to 100 percent, are but a few of the features of the new instrument.

Frequency accuracy and all other output and adjustment levels are well within the tolerances established by the FCC for Part 19 (95) equipment.

TRAM TR-27E TRAM

ANOTHER STEP FORWARD IN CB COMMUNICATIONS

TR-27E BASE STATION

Transmitter

70% or better Transmitter efficiency provides 3.5 watts guaranteed minimum RF Output with 100% High Level Modulation. (Keyed Compression - Base Station)

Receiver

Sensitivity - .1 uv. for 300 milliwatts of audio

Selectivity - 5 kc. @ 6 db. Adjacent channels 60 db. down

Signal to Noise Ratio - .3 uv. for 10 db.

TRAM SERVICE TIP No. 4

POWER INPUT TO THE FINAL AMPLIFIER

When checking D.C. power input, the plate voltage should be measured between the cathode, pin #7 of the 5763 and the +B end of the 5763 plate choke. The D. C. milliammeter should be inserted between the +B end of the plate choke and +B. Before making power input measurements, be sure both the final plate trimmer and antenna matching padder are properly tuned.

Tune the plate trimmer for minimum D. C. current consistent with maximum output and the antenna padder for maximum power out.

Be sure to use a dummy load with the R. F. power meter.

The TRAM 23 base station, renowned for its superior performance and dependability under the most exacting conditions, is now offered in an improved model, the TR-27E. In addition to the many features that are standard on all TRAM units, you will find:

- The "s" meter is now a D'Arsonval moving coil type with an illuminated panoramic scale, accurately calibrated to 60 db over S9.
- The cabinet now has an extra durable wrinkle finish.
- The 23 channel selector switch carries the channel number illuminated in the panel.
- The receiver overload characteristic is improved by 20 db.
- Adjacent channel rejection is improved by approximately 5 db
- And in many other respects the overall excellence of TRAM equipment has been given extraordinary consideration and effort.

ALSO AVAILABLE:

TR-27D, 8 channel Base Station
TR-70B, 8 channel Mobile
TR-27C, 23 channel Mobile

TRAM ELECTRONICS, INC.
P.O. Box 187, Dept. 1 A
Winnisquam, N.H., 03289

Please send by return mail at no obligation, detailed information and specifications on TRAM Citizens Band equipment.

Name _____ Call No. _____

Street _____

City _____ Zone _____

State _____ Zip Code _____

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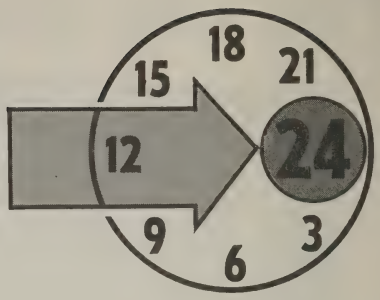


AMATEUR RADIO IS NOT A HOBBY

CB'ers who follow activities in ham-dom are aware that for the past nine months a controversy has been raging over where the future of amateur radio lies. A good many of the old-time hams are concerned over what they call "Appliance Operators" — new hams who rush out and buy everything for their station factory built, and then rush home and plug it in.

The ham's association, the ARRL, has filed a petition with the FCC which would re-create an amateur licensing structure based upon technical proficiency. Those who could pass the harder tests would have more operating privileges. Those that couldn't would have to stick to morse code (CW) on most amateur bands (the use of radiotelephone being a supreme privilege).

In the November 1963 issue of "73" magazine, a leading ham-dom journal, world-respected and high level amateur Bill Orr, W6SAI, of Palo Alto, California writes a plea for all amateurs to evaluate their operations in terms of PICON — **public interest, convenience and necessity.**

The crux of amateur Orr's thesis is as follows:

"The view of amateur radio as a hobby is a widespread and dangerous one, and the fundamental definition of amateur radio as a service has been eclipsed in the past few years in a mass exodus to the hobby concept."

"Amateur radio," and Orr cited FCC definitions and world-wide Geneva (Switzerland) Radio Conference regulations, "is a service to advance skills in communications and technical phases of the art" (of electronics).

It is not a hobby.

Which brings up an interesting question. Amateur radio isn't a hobby. CB radio can't be a hobby. And to date the FCC has turned deaf ears on any suggestions that a radio service to be known as a "Hobby Service" be created.

Where does a red-blooded American, who wants to twiddle with communications, in his spare time, **as a hobby,** go to find his mecca?

Just how long can the FCC ignore a great American public yerning for two-way radio hobby frequencies? The precedent for establishing certain frequencies for Hobby use **already exists** in Class C CB.

Model aircraft enthusiasts who build and fly radio controlled planes can hardly be considered doing anything **except pursuing a hobby.**

If the FCC will give **this** hobby group valuable spectrum space (channels) for the pursuit of **their** hobby, why not channels for those of us who want to pursue our hobby — **talking?**

PART 19 — GONE FOREVER!

The Federal Communications Commission, during the first week of December, was expected to kill Part 19 forever. Wipe it from the books and Commission records, as it were.

But before this bit of news causes some concern on your part, please be advised that the Commission has re-numbered the rules parts in nearly **all** Safety and Special Radio Services.

Effective on or about December 5, the time tested Part 19 becomes **Part 95** under the Commission's new numbering system.

This does not in any way change the status of the pending Part 19 (95) proposal to re-do the rules and regulations governing our radio service.

It merely means that when you write the Government Printing Office for a copy of Part 19 after December 5, you will request a copy of **Part 95.**

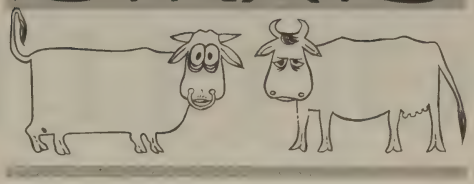
Many other services also had their old and familiar numerical designations changed.

For example, Part 7 stations in the maritime service have become Part 81; Part 8 stations in the maritime service have become Part 83. Part 9 stations in the aviation service are now Part 87; Part 10 stations in the public safety radio service are now Part 89; Part 10 stations in the industrial radio service will become Part 10; and, amateur radio service stations now under Part 12 will become Part 97 operations.

Rules that were adopted and published in the approximate period October 31 to December 5 were to have been printed in the terms of the older (Part 19, etc.) designations, and then editorially **republished** after publication of the revised rules when they were released on or about December 5.

Remember now — **we are Part 95 stations, no longer Part 19.**

STRAYS



FOREIGN CB CALL-BOOK LISTING

Horizons wishes to announce that effective with the Winter-1964 edition of the Citizens Band Call-Book, an attempt will be made to list the names and addresses of 27 megacycle radio service devotees in Canada, Central and South America and in the Caribbean. In as much as most foreign countries (Canada in particular) **will not** make the listing material available, we are asking our readers to contribute the names, addresses and call letters of CB (27 megacycle) operators you know of in foreign places.

This listing will probably start small and grow as more names and addresses become known to state-side CB'ers. We need the cooperation of **ALL** CB'ers having such information to make this listing useful.

Please send any such names and addresses, with their assigned calls if known, to **Foreign CB Listing, P.O. Box 1557, Oklahoma City 1, Oklahoma.**

$8.00 LICENSE FEE — STARTS JANUARY 1

CB'ers are reminded that effective with all applications the Commission receives **on or after** January 1, 1964, a license application fee of $8.00 in check or (preferably) U.S. postal money order must accompany the submission. Any applications received by the Commission after December 31, 1963, without the $8.00 license application fee, will be returned to the sender.

FCC TO GET $15,800,000 IN 1964?

A budget for $15,800,000 for salaries and expenses of the FCC for the fiscal year 1964, which began **last** July 1, has been approved by the House Appropriation's Committee. The budget amount approved is some $849,450 more than the fiscal 1963 budget but more than $700,000 less than President Kennedy requested in his budget.

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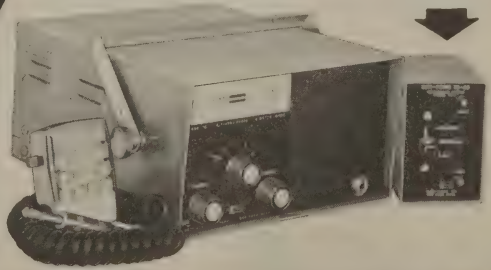

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CB CLUB BASICS

MANY THINGS TO MANY PEOPLE

A good CB club is as hard to define as good advertising. You never know how good it is until it produces results, and then you are either very sure it is good, or very sure it is bad. The results tell the story.

Over the years the emergence of CB Clubs has been both slow and rapid. Many clubs that stood for a great deal of prestige two years ago are but dark memories and faded wallet cards today. Many other clubs that began years ago are still going and as strong as ever.

There has to be a reason some fail, some drift along and a few make it big.

That reason is usually leadership.

For a club to exist there must be a good sound basis for its survival.

If you were to pour over the By-Laws of several dozen CB clubs, as we did in preparing this report, you might wonder aloud "how do they make it work?"

Many clubs are formed without benefit of By-Laws, and while they may attract numerous devotees in their early stages of formation, their strict adherence to a social format at all club functions usually sooner or later is their downfall. Note we said usually. There are a few clubs around who live only on social activities as food for club meetings, and they have made it work. Again, the difference must be leadership.

Let's explore the leadership problem before we get into the many different directions in which a CB club can move towards successful operation.

AN INDIVIDUAL

Webter defines a leader in many ways. "A guiding or directing head," or, "one who has the ability to lead."

In any organization that involves people, we think a few other important definitions should be added to Webster's.

"One who works well with people," and, "one with the ability to generate enthusiasm and work from club members."

Too often the work of a CB club is done by a very small percentage of the hands. This will eventually result in some members feeling that the club is "being run" by the group doing the work, and this in turn leads to hard feelings that may cause a splinter group to form out of the original nucleus of the club.

A good leader is one who generates in other members of the club the desire to work together as a team of co-players.

A leader who inspires the popular masses with his leadership, only to delegate the work of the organization to a select few, is asking for the eventual rifts that will sooner or later bring the club down like a tumbling house of cards.

It is very, very important that every member in the club participate in its activities. This is a very tough thing for many leaders to recognize, because they feel that "by golly I'm the leader, so I'll do the work and show these fellows what a great leader I am."

He usually is. But the only person he leads is himself and few others even get inspired.

A good leader then is an inspirer, and an organizer. He should never attempt to be anything more. If he feels he has to be more than this, then it is time for a re-evaluation of the basic ideals the club is operating on. Something is wrong when a club allows one or a handful of its members to do all of the work.

It's an old adage, but it is true. You only get out of something what you put into it. A club that allows 90 percent or more of its members to drift along on their $2.00 per year dues, never lifting a hand to participate in the work of running the club, will probably have very few of those do-nothing

members re-newing their club membership in future years.

LEADERS AND FOLLOWERS

A club is a formation of people. And people are different. They don't look alike, they don't act alike, they don't think alike.

But in the club, your goal is to have them acting alike and thinking alike. At least towards a common goal.

Leaders develop from members. Last year's new member may be this year's club leader.

In most of the clubs we have witnessed only those individuals with a special spark for leadership usually get the **opportunity** to lead. They usually **create their own opportunities** through their own desires and drive.

On the other hand, many successful clubs have found that if they give every club member an opportunity to prove himself, with all members starting off on an even footing, several of the quieter, less presumpuous members become real leaders, simply because they were given the **opportunity** to lead.

These are the fellows that every club should try to bring out into the open and get active in club affairs. Merely paying your dues and attending meetings is seldom sufficient activity to warrant their long-term interest.

Membership participation, with all members particiating, is the surest way we know of insuring that your club will be around next year!

FORMING A CLUB

A club usually forms because of a need. As noted earlier, that need can be social, technical, or the desire to be helpful in the community.

To date the most successful of the three has been the latter; the desire to be helpful in one's community.

Being of service in your community can take many forms.

REACT, sponsored non-commercially by the **Hallicrafters Company**, Chicago, Illinois strives to keep its members ready for participation in any emergency in their home area where two-way radio communications can be of service.

Many local groups, providing radio equipped search and rescue emergency communications, or simply service organizations, have similar goals.

Let's examine a few of these.

The **Emergency Communications Organization** of Texarkana, Texas has a set of By-Laws like many other clubs.

Article 2 of their By-Laws specifies the club shall be:

(A) . . . of service to the community,

(B) . . . ready to assist in any emergency,

(C) . . . to aid and assist in all rescue work when called upon;

(D) . . . to train and instruct members in the use of equipment pertaining to first aid and rescue work;

(E) . . . to provide a practical means of forming enduring friendships.

Article 3 further notes ". . . membership in this club shall be restricted to persons interested in rescue work . . ."

The Texarkana club has regular meetings on the first and third Monday night of each month. Like many other clubs interested in emergency work, they feel that twice per month meetings are necessary if adequate training sessions are to be held to keep all members acquainted with search and rescue techniques.

A slightly different approach to emergency communications is found in Atlanta.

There the **CONTAC Radio Association** (Communications of Necessity To Aid Citizens) is affiliated with the Atlanta Metropolitan Area Civil Defense program.

Much has been said in print about the advisability of Civil Defense participation. It has been our observation that Civil Defense participation can be a dangerous crutch to lean on, if it is going to be the **only crutch** holding the club's emergency communications program together.

The CONTAC group is affiliated with CD, but this is hardly the limit of their activities.

CONTAC **monitors its members** (and only its members) for violation of Part 95 and warns them when they are treading on soft Part 95 ice.

Articles II of the CONTAC By-Laws specify these objectives for the organization:

(A) . . . to make available to City, State or Federal agencies the service of its members, equipment and knowledge in any activity determined by the Board to be in the interest of the community or nation.

(B) . . . to establish, maintain, supervise and expand an organization designed to carry out a recognized program of evaluation and study of radio techniques, methods and equipment as authorized by the Federal Communications Commission . . . the results of said activity to be made available to any interested individual or group of individuals as may seek the organization's assistance.

(C) . . . to provide a focal point where information pertinent to the interests of its members may be correlated, evaluated and relayed.

(D) . . . To provide organized, comprehensive plans to protect, hold, save and defend all interests and rights of Citizens Radio Service licensees.

(E) . . . to help develop a better understanding between its members and the general public and/or other groups.

(F) . . . to provide regular opportunities for recreation and social interaction for members and their families or friends.

Note, if you will, that both the CONTAC and Texarkana Emergency groups **do not exclude** social exchanges among their members. In fact, both stipulate that social activities will be a part of the group's program.

But neither group makes the social activities the **prime** reason for being. They simply have been farsighted enough to realize that **no club can expect to survive** if it is **all work and no play.**

CLUB PROJECT

There is nothing like an all-member club project to get the wheels of activity humming.

Club projects take many forms. Numerous clubs have purchased a second-hand school bus from a local school district and then re-fitted the bus as an emergency vehicle equipped with a portable power plant, first aid equipment, one or more CB transceivers, VHF receivers to monitor the local police, CD and sheriff's frequencies, a complement of club owned hand-held units, and even emergency food and water supplies.

Such a project does two things for a club. The work of preparing the vehicle usually involves one or more months of spare time efforts, and if properly handled brings all club members together with paint brushes and the usual supply of drills, soldering irons, etc., in hand. Almost every club memebr has some special talent, whether it be interior decorating or being a motor mechanic, and all can be a part of the emergency-bus re-fitting program.

Secondly, an emergency vehicle for the club helps the club establish an identity in the town it serves, appearing in parades, at public functions and wherever the club's activities can be put to good use.

Other clubs have constructed a club building. An Arkansas Club has recently completed a $2,000 building to serve its membership. Outfitted as a combination recreation hall, CB emergency communications center and meeting pace, the club raised the money for the building through a local fund drive.

Some clubs have carried the "24 hour monitoring" approach even further. Most illustrative of this is the work done by the **Dixie Communications Club, Inc.,** of Decatur, Georgia.

The club is licensed under KDD0547, and their station is located atop Stone Mountain, a natural monument in north central Georgia. Nearly 900 feet above the surrounding flat Georgia terrain, the club's KDD0547 monitors channels 9 and 15 with volunteer members on a near 24 hour basis. Twin Browning instalations, using the Browning 23 S-Nine transmitter and R-2700 A receiver, allow the "Dixie Monitor" (KDD0547) to maintain reliable communications over a 100-mile radius from the Stone Mountain location.

Mobiles traveling through the area frequently call on the Dixie Monitor for help in locating services, and many also request information on such subjects as "what does Athens, Georgia monitor."

The Dixie Monitor performs many other functions, including the relaying of distress calls from one area of the state to another area.

For example on June 29th of this past summer at 1430 hours Georgia time the Dixie Monitor received a call from KDB-3209 advising that the Athens Civil Defense unit and the Tri-County CB Club were requesting assistance in searching Oconee River for victims of a suspected drowning. The Athens group asked for "12 to 15 men with walkie-talkies to search 5 miles of river bank."

At 1435 (5 minutes later) after a plea for assistance was transmitted by the Dixie Monitor, KDD1100 of Lawrenceville, Georgia offered the assistance of the Lawrenceville CB Club. The Lawrenceville CB Club was wispatched to the Athens area, thanks to the alert from the Dixie Monitor.

The search continued for nearly 24 hours, with the Dixie Monitor maintaining contact with the Athens base of KDD3209, occasionally passing personal message from the home folks of the Lawrenceville group on to the Lawrenceville volunteers searching the river area. In this case two clubs were able to band together in a joint search effort, because they knew that they could count on the Dixie Monitor to summon help when needed. Direct contact between the two groups was not possible.

Not every club will have a "Stone Mountain" on which to locate a 24 hour monitor, but most areas do have some high point where radio communications is better than on the surrounding terrain. Even in flat country a joint effort to locate a man-made object on which to mount a tall antenna (clear of nearby obstructions) provides the CB Club with a real opportunity to be of service to its community.

In any project such as this, the project's success will depend to a large measure on what the club does with the finished product.

The Dixie Monitor, for example, would not serve the public very well if only a handful of Dixie Communication Club members knew about it. But the club has seen the wisdom of alerting the entire surounding area of the importance of their project, and consequently dozens of area clubs use the Monitor to work together. This club obviously stands out as a leader in its area because it is bigger than its own club members. It is nearly state-wide in its influence. Good public relations, then, is a must for any club project. Whether you hand in a press release on your new emergency communications van to the local newspaper, or issue a press release describing the important part your van played in a local emergency, the really important point is that you let the public know what you are doing.

This builds real pride on the part of club members in your club, and as their pride of being a part of the joint effort grows, so does their interest and enthusiasm for the club.

And this is where the strictly socially oriented clubs become separated from the service oriented clubs.

Socially oriented cubs are fun, but they may lack long-term purpose. Friction between members develops because of little things, such as one member's son pouring ice tea on another member's wife. A small incident, perhaps, but we know of one group in California where this type of incident eventually dis-banded the group because the membership had nothing more important to do with itself at meetings than choose up sides!

On the other hand a service oriented club rises above such small incidents to work on a goal. The goal is the most important thing occupying all member's minds and as a result it over-shadows the natural human differences between people.

MOLDING THE CLUB TO FIT THE COMMUNITY

In the end, a successul club is one which serves its community well.

In a college community in the mid-west, an important club function might be a volunteer group that aids the local police force in keeping traffic moving during a Saturday afternoon football game at the local college.

In a coastal town in Florida, a surf-oriented club that trains its members in the techniques of surf rescue might best serve the public interest.

In Kansas, Oklahoma or Texas, a group of local townspeople and ranchers with CB might decide the most important thing they

CONTINUED — Page 20

TIME

IS RUNNING OUT

Thousands of new **and** old Class D radio station owners have already placed their orders for the brand-new **better than ever** 1964 Citizens Band Class D Call-Book. This brand new edition, to be released early in February, will list by numerical sequence the call letters, names and addresses of all CB'ers granted new licenses from June 1963 through December 1963. This is the **only** reference book in CB radio that lists (complete-nationwide) all new CB'ers! Order your copy today using one of the order card forms to the right, **just $3.95 postpaid!**

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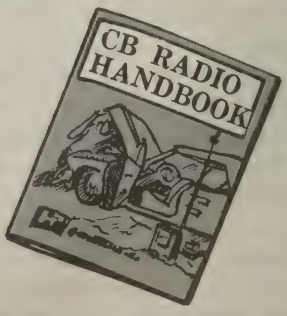

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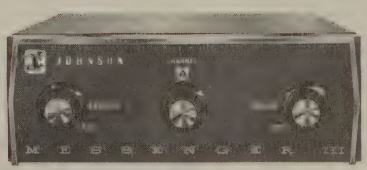
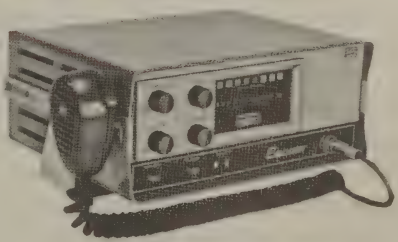
AND A HAPPY NEW YEAR TOO!

The CB manufacturers are really going all out in the new year to provide us with the very latest innovations in our CB gear. Many, many new products will be on display this month at your favorite CB dealer, including the three new transceivers shown below. Go in and see them today!



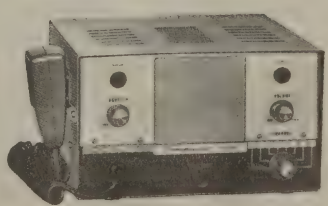
(A)

(A) **Messenger III** — from the E. F. Johnson Company. 11 channel full transistorized operation with a host of extras including a battery pack (rechargeable supply) double conversion receiver, 3 watt public address system and much more. Price $189.95



(B)

(B) **Escort** — from Pearce Simpson, Inc. 8 channel crystal controlled transmit plus external extra crystal socket, and 23 channel tuneable receiver. Crystal controlled receive; frequency spotting switch; on-off noise limiter, illuminated slide rule dial and a host of other features. Price $224.50.



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(C) **ED-278** — from Vocaline Company. 8 channel crystal control with "fine-tuning control" for exact receiver adjustment on stations slightly off channel. Squelch and volume control up front. Transmit and power-on indicating lights on front panel. Rugged design for dependable communications. Price $199.95.

THE LEGAL VIEW

by Bob Langlotz
KCI 2290

Editor's Note: During the past nine months the Federal Communications Commission has entered the area of rules enforcement utilizing a new monetary fines tool. During the past six months the Commission's general attitude towards alleged or suspected Part 19 (95) violators has been ever more severe in its penalties. **CB Horizons** has asked noted CB law student Robert C. Langlotz, KCI2290, Barboursville, Virginia to present some of the facts he has recently dug up on FCC enforcement procedures.

BUT IS IT LEGAL?

On July 29th of this past summer the FCC Review Board, by members Pincock and Slong (with member Nelson dissenting and issuing a statement), adopted a decision revoking the Citizens Radio Service license 20W1705 of Ralph Yago, Pittsburg, Pennsylvania. The license revocation was based on Yago's alleged refusal to permit FCC inspectors to inspect his station.

The Commission issued decision stated: "In summary, the Board is of the view that this record establishes that Yago's refusal to permit inspection was deliberate and willful; and that such refusal has frustrated the Commission's authority under Section 303 (n) of the Act, to inspect his station; and that Yago has violated Section 19.73 of the Commission's Rules, requiring a licensee to make his station available for inspection. The Board is of the further view that this refusal is a serious challenge to the Commission's authority to inspect stations and is a substantive violation of the Rules, requiring revocation of Yago's license. In reaching this conclusion, the Board has given careful consideration to Yago's testimony, the Initial Decision, and the entire record in this proceeding. Special consideration has also been given to the lateness of the hour of the attempted inspection, and the attendant entry of the home, but such entry is only a consequence of the operation of the station in the home. The Board has considered all of Yago's contentions and finds nothing which would excuse or mitigate the serious violation of the Commission's authority. The seriousness of a refusal to permit inspection lies in the fact that it forecloses the Commission from ascertaining essential facts pertaining to the operation of a station, facts which may be vital to the resolution of a number of questions, including interference problems involving public safety, etc."

That was the Commission's public statement on the now famous Yago case.

But to me the Commission raises serious questions, not the least of which is, "Is it Legal?"

Let's examine these facts.

At ten PM one evening two men knocked on Mr. Yago's door, flashed a card of some sort and announced they were FCC inspectors. Now Mr. Yago had been experiencing difficulty with some of his neighbors concerning alleged interference to television reception. He had been threatened numerous times with physical violence, had been

pushed into a fist fight with a neighbor and had even been shot at in his car. In view of these circumstances it is not too surprising that he should tell the two card flashers to "go to blazes."

On the basis of this short history alone, and in as much as Mr. Yago had never before been contacted by the FCC, it is more than a little dis-concerting to see Mr. Yago's license revoked.

The examiners of the Review Board decided that anyone who owns a CB set and a license is subject to search and seizure at all times. The un-answered moral and legal question here is "do you, as a CB'er, waive your right to the Fourth Amendment of the Constitution, protection from search and seizure, without a search warrant, when you take out a CB license?"

Even the FBI needs a warrant when they come calling.

We respectfully draw all readers attention to the Federal Administrtive Procedures Act, Section 9, which sets forth the guidelines under which the FCC functions. It reads:

"Except in cases of willfulness or those in which public health, interest or safety requires otherwise, no withdrawal, suspension, revocation or annulment of any license shall be lawful unless prior to the institution of agency proceedings thereafter, facts or conduct which may warrant such action **shall have been called to the attention of the licensee by the agency in writing** (emphasis ours — editor) and the licensee shall have been accorded opportunity to demonstrate or achieve compliance with all lawful requirements."

There are today, in the vast complex of federal statutes, numerous instances of federal agency personnel either willfully or without benefit of counsel over stepping their own rights under law or proclamation.

In any free republic, the final determination of what is legal and not legal remains in the hands of a freely informed public.

ARE PART 19 VIOLATIONS FINEABLE?

Hardly a day goes by now that someone in the Class D 'field isn't cited for an alleged violation of section 19.61 (a), or unauthorized communications, and at least once per week a CB'er is notified of an apparent monetary liability for $100, or more, for repeated violations of this "rule."

There are serious legal questions raised as to whether violation of 19.61 (a) is a fineable offense. I want you to think about them.

Title 47 Section 510 is a public law passed by Congress in May of 1962 to provide small "fines" and forfeitures for 12 categories of violations of FCC Rules and Regulations.

The following are the 12 violation areas **singled out by Congress** (which is the supreme authority in this case) to be fined, and this material has been copied directly from Title 47, Section 510.

"When a radio station . . .

(1) is operated by a person not holding a valid operator's license or permit of the class prescribed in the rules and regulations of the Commission for the operation of such station;

(2) fails to identify itself at the times and in the manner prescribed in the rules and regulations of the Commission;

(3) transmits any false call contrary to the regulations of the Commission;

(4) is operated on a frequency not authorized by the Commission for use by such stations;

(5) transmits unauthorized communications on any frequency designated as a distress or calling frequency in the rules and regulations of the Commission;

(6) interferes with any distress call or distress communication contrary to the regulations of the Commission;

(7) fails to attenuate spurious emissions to the extent required by the rules and regulations of the Commission;

(8) is operated with power in excess of that authorized by the Commission;

(9) renders a communications service not authorized by the Commission for that particular station;

(10) is operated with a type of emission not authorized by the Commission;

(11) is operated with transmitting equipment other than that authorized by the Commission; or

(12) fails to respond to official communications from the Commission.

As can be readily seen, the **only** point which is even remotely pertinent to the question of 19.61(a) is number nine (9). Number nine (9) reads "renders a communication service not authorized by the Commission for that particular station."

The impact and idea of this passage is "unauthorized SERVICE," not **unauthorized communication.**

The FCC has apparently seen fit, however, to rewrite section 9 of the 12 fineable categories I quote from, for their own section 1.80 (c). Now the Commission has taken section nine above, and expanded it to read under their own numbering as 1.80 (c) "use of a radio station to render a communication service, **including the transmission of communications not permitted by the provisions of this chapter,** which is not authorized by the Commission." The Commission, on its own volition, **not** with any authority from Congress, has added the section noted above in bold face.

I feel that the addition of the section in bold face completely changes the intent of the law of Congress (Public Law 87-448) to suit the wishes of the Commission, not as directed by Congressional approval. This I feel is **not** what Congress had in mind when it passed this law.

There is in Title 47 of the U.S. Code Section 326. This section reads as follows:

"Nothing in this act shall be understood or construed to give the Commission the power of censorship over radio communications or signals transmitted by any radio station, and no regulations or conditions shall be promulgated or fixed by the Commission which shall interfere with the rights of free speech by means of radio communications."

Thus we see that the above policy of the Commission is at direct variance with the actual laws that Congress has passed.

From the foregoing, we draw the inescapable conclusion that when you sign your application for a Class D license, you waive your rights to protection under the Bill of Rights of the Constitution, specifically Article 1, freedom of speech, and Article 4, freedom from search and seizure.

Does Congress and your congressman know this? I don't think they do, and I am going to tell mine. How about you?

CB CLUBS — continued

could do for their town would be to establish a "Tornado Watch." During tornado season, all CB units in the area would agree to automatically switch to a single channel whenever tornadoes are forecast. With all members participating, a rancher on one side of town spotting a death-dealing funnel could quickly alert the entire town by hopping on his radio and sounding the alarm.

In Los Angeles, the most important CB club function might be volunteer freeway reporters working with the highway patrol to sound the warning when traffic is tied up because of an accident.

In a small mountain town in the Rockies, the local sheriff would probably welcome the aid of a radio equipped group when winter weather keeps him from covering all of the surrounding country because he is both short handed and unable to travel in heavy snows.

The examples are numerous and in each case **it will be up to the local club to analyze its own town,** what the town needs, and what is important to the town. Then form a CB volunteer group around that need, equip and train yourselves for action. Then **and only then** should you report to the local authorities and volunteer your services.

Give them an example of what you can do by arranging to put on a simulated emergency. Bring the local newspaper into the simulated emergency and let them report on it in your local paper. In this way the town's leaders are sold on the project and the people in town learn about your program in its infancy and this will go a long way towards their accepting your group for what it really is — **A vounteer corps of townspeople equipped with two-way radios, ready and willing to assist whenever a need arises.**

CB HELP ASKED

Detective Dozs, Tucson Police Department, Tucson, Arizona has asked the help of CBH readers in tracing down the whereabouts of two users of the CB call KEJ 1468. The pair, identified as Gerald and Marvin Brown, brothers, are suspected of traveling at some point between Arizona and Florida, West Virginia or up-state New York.

They are wanted for questioning in connection with the burglary of a two-way radio shop, Centro Electronico, in Tucson.

Any information on the pair should be forwarded directly to the Tucson Police Department Detective, **not** CB Horizons.

An Inside Look At An Industry Pioneer

ANTENNA SPECIALISTS

Want to meet the people who built the first CB antenna? Then come along with us to The Antenna Specialists Company.

After a short drive from the center of bustling, industrialized Cleveland, Ohio, we arrive at the home of those well known "Stripes of Quality." We have been invited by sales manager Bob Beebe to tour the entire manufacturing plant. But first let's review the interesting background of this major CB antenna supplier.

Back in 1958 when RCA brought out the first production line 27 mc Citizens Band transceiver, Antenna Specialists built the telescopic antenna for it. In 1959 the first ground plane antenna for CB was marketed by Antenna Specialists. That was the M-22 and, by the time-table of Citizens Band growth, that was a long time ago! In 1961 the famous model M-81 "Magnum" was introduced. According to company officials, they have actually designed more than 250 different CB antennas during the last five years! Probably among the more popular models are the M-67, M-1, FR152 and M-103 (CB-AM) mobile antennas and the MC-27 and M-81 base station antennas.

One of the best known gentlemen in the electronics industry deserves much of the credit for the dynamic growth of Antenna Specialists. He is Mr. Milt Friedberg, president of the company. In addition to being a friendly fellow and a gracious host, Milt has a pretty impressive history in the communications business. His experience designing and manufacturing two-way antennas dates back more than twenty years. After serving as Chief Engineer for Ward Products (another familiar name in automotive antennas), Milt spent the war years as a design engineer for Motorola's two-way communications division.

M-81 Coil is expertly wound by Annie Mezzaopera.

Antenna Specialists is a major supplier of telescopic antennas such as the one held here by Mrs. Elva Williams.

John Bossman and Mike Ukmar are shown with the MR-77, while Fred Ollie prepares to run a test on the M-111 vertical/horizontal beam on the test tower.

Larry Kline, chief engineer, maintains this sample board where some of the firm's 2500 different antenna designs are catalogued.

Friedberg, who holds both Electrical and Mechanical Engineering degrees, is an active member of the EIA Land Mobile Committee, a long-time participant in the PGVC, and also holds memberships in IEEE and CCC. Milt is a Registered Professional Engineer.

Under Mr. Friedberg's direction, Antenna Specialists has progressed from an 1800 sq. ft. plant staffed by three people in 1953 to an 80,000 sq. ft. complex involving nearly 200 persons in 1963! A basic part of the firm's business has always been the supplying of bases, springs and whips to manufacturers of original equipment. Such two-way giants as GE, RCA and Motorola account for a considerable portion of the plant's production. However, the constantly expanding Citizens Band field is considered a primary market by Antenna Specialists—and the volume in CB antennas is steadily increasing.

Now that we're better acquainted, let's take that tour that Bob Beebe promised us. Just to get in the proper mood we visited the executive offices of Mr. Friedberg and Mr. Joseph Spivac, secretary-treasurer. Here we stepped upon a carpet of red and black stripes. Shook hands with pleasant fellows wearing red and black striped ties with matching "Stripes of Quality" cuff links! And we stood in the glow from a lamp sporting the same familiar decor. It's our observation that the people at Antenna Specialists take both their **Stripes** and their **Quality** seriously!

Entering the assembly area, our first impression was one of immensity. Dozens of production personnel were busily involved in dozens of different operations, putting together literally thousands of small antennas. Most of these were the very compact telescopic models used in walkie-talkies and portable AM broadcast and shortwave receivers.

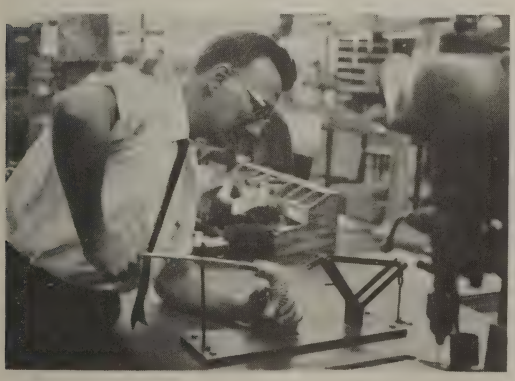
Anyone who has even soldered a coax connector or stripped a piece of RG-58 would appreciate the way they do it there!

It's amazing how quickly and neatly these operations are performed — with the benefit of a specially designed hydraulic stripper and stationary soldering iron. The ladies make it look easy as they prepare hundreds of pre-cut mobile antenna lead-ins per day.

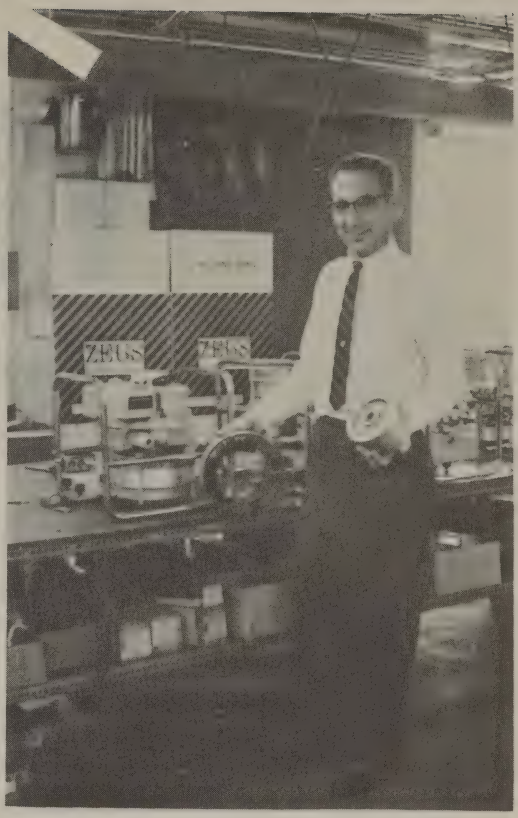
Continuing on, we entered the production area for base station CB antennas. For this phase aluminum tubing and steel rods are shipped in and warehoused in great tonnages. With impressive rapidity several precise mechanical operations are performed on the various components to make up vertical elements, radials and mounting hardware that fit together easily — but permanently.

One of the more interesting aspects of base station antenna fabrication is the coil winding operation. Here we were afforded a first-hand glimpse of the "heart" of the "Magnum" — its carefully wound, thoroughly protected and sealed impedance-matching coil.

On a special vibration-table outside the plant we witnessed an M-81 getting a thorough environmental test. Water was being sprayed directly on the unit while it was whipped vigorously back and forth on the motor-droven mounting platform. This test, we understand, is continued for hundreds of hour to assure that no water penetration will occur — even after many years of normal use. (It is interesting to note that the major challenges of CB antenna manufacture are structural rather than electrical. And, as a result, Antenna Specialists probably does as much mechanical engineering as electrical engineering.)



Chief inspector William Antio subjects ASP-3 spring to rigid test. 50 lb. tension is applied to cable while spring is bent a full 90 degrees.



Milt Friedberg, president of Antenna Specialists, shows us the stator and rotor assemblies for the Zeus.

Up on the roof we discovered an impressive facility for evaluating every type of antenna. (An additional test range is also maintained in open country outside the city.) During pre-production testing each antenna is elevated above the test tower and rotated slowly while a constantly regulated signal is fed into it. Reference antennas measure the radiated power. Correlation of these readings with the position of the antenna provides the essential information for plotting the radiation pattern.

To complete our tour, Mr. Friedberg showed us the Zeus Generator Division. (In 1962 A/S purchased this division from Borg-Warner.) The Zeus gasoline driven alternators provide portable, standby and emergency power for a wide variety of uses. To the CB'er and especially the CB emer-

CONTINUED — Page 26

A Two Evening Project

VOX For CB

VOICE CONTROLLED TRANSMITTER

In the earliest days of CB most transceivers were turned on and off, that is from transmit to receive, by means of a toggle or slide switch mounted on the front of the unit.

Soon "push-to-talk" became the rage as transceiver manufacturers discovered the extra operating convenience they could offer to their set users with this method of transceiver control.

This report describes yet a third method of transceiver control. In communications circles, voice-controlled operation, abbreviated VOX, is not uncommon or new. Practically all sophisticated amateur radio single-sideband (SSB) equipment is now outfitted with VOX control, and in SSB type communications it serves a definite purpose.

VOX control offers the operator complete freedom from having to utilize his hands for on and off operation of his transceiver. A neck-hung or throat microphone, for example, worn by the mobile operator, and employed in conjunction with a VOX unit, leaves the mobile operator with nothing to do but drive, talk and listen. In busy congested traffic, this certainly has many advantages.

But not all VOX operation should be limited to mobile utilization. A busy dispatcher, or simply the gal on the desk who mans the telephone switchboard, the CB base unit and the busy affairs of the office, would find the extra freedom a VOX unit presents well worth the investment in time and money in acquiring VOX for the base.

A VOX unit is essentially a microphone preamplifier, and a sensing device that detects instantly when audio is being fed into it, and then switches (turns on) the CB transmitter.

You now do all of this manually, with your hand and your brain, when you pick up the microphone and push the push-to-talk button.

VOX is automation for it frees one hand that would normally be clamped around the mike and mike button.

The VOX unit described here is an experimental model developed by Horizons. Like many experimental prototype units, it will undoubtedly stand the many changes of refinement and the advancing state of the VOX art if CB'ers show an interest in going "VOX."

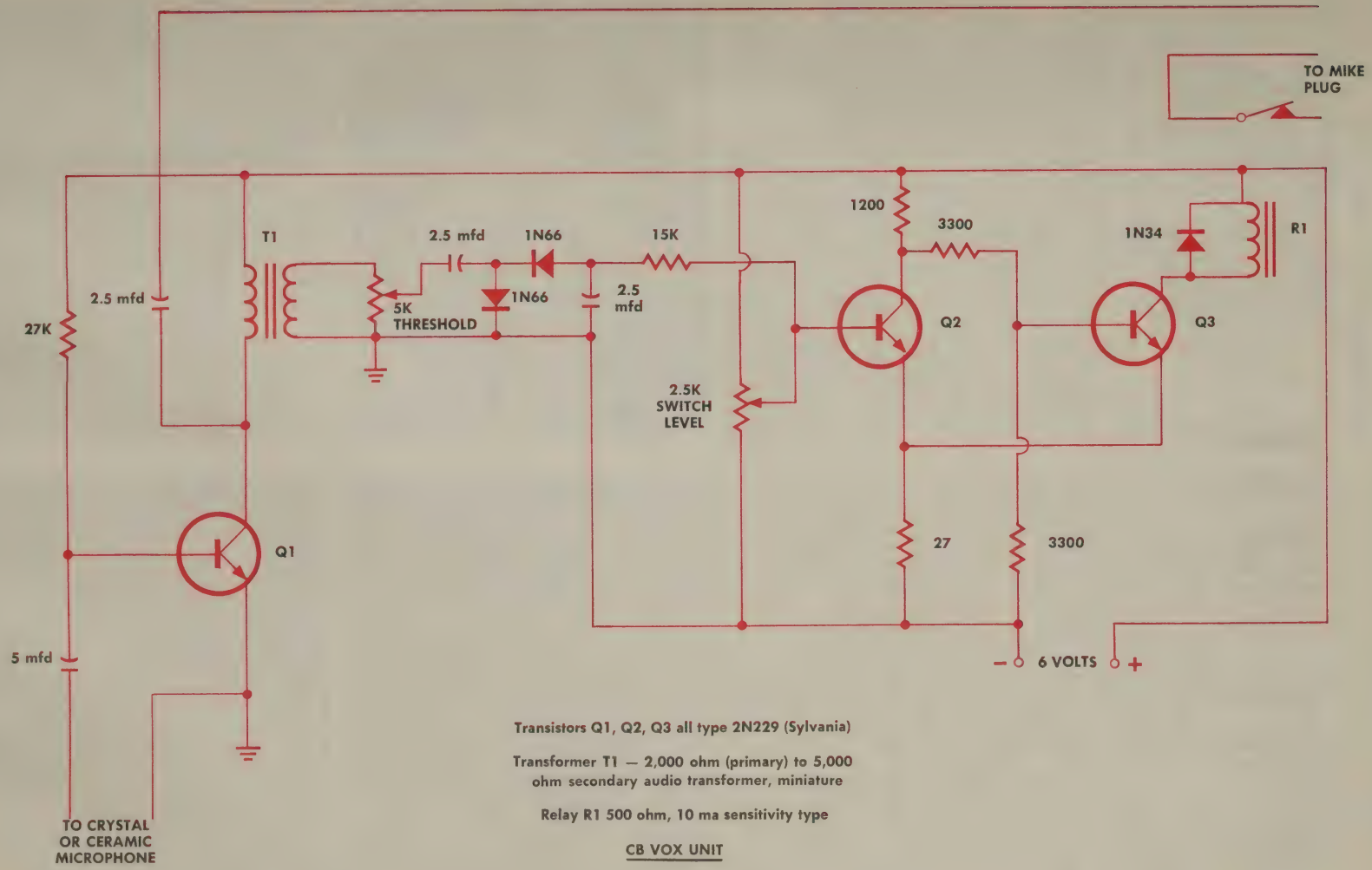
Every attempt has been made to keep the VOX unit described as simple to build and adjust as possible. At the risk of over-simplifying the unit, built around commonly available component parts, we may have left out a measure of range control that some operators would prefer.

If this proves to be the case, there will undoubtedly be refinements in later articles on this subject.

In this circuit, transistor Q1 and its associated parts act as an audio preamplifier. Note that the output splits into two parts; one feeds the normal mike input plug through a level control while the second side of the split feeds the relay-switching circuit.

The two 1N66 diodes (any comparable common diodes would do) in the relay switching circuit are hooked up as a voltage doubler, and in turn drive the two-transistor switch comprised of transistors Q2 and Q3.

When the mike picks up any sound



Transistors Q1, Q2, Q3 all type 2N229 (Sylvania)

Transformer T1 — 2,000 ohm (primary) to 5,000 ohm secondary audio transformer, miniature

Relay R1 500 ohm, 10 ma sensitivity type

CB VOX UNIT

great enough to trigger the VOX action, here is what takes place:

Q1 amplifies the sound up to about 10 milliwatts (this is the point at which operation begins). The voltage doubler rectifies the audio into direct current, which is applied to the base of transistor Q2. This in turn initiates a "flip-flop" sort of action resulting in the relaying **pulling-in.** Since the relay contacts are wired in place of the normal microphone push-to-talk switch, the transceiver is switched on to the "transmit" cycle.

When the sound picked up by the microphone and amplified by Q1 ceases, the capacitors in the voltage double circuit hold the VOX **on** for a few milliseconds before switching the rig back to receive. This avoids having "chatter" everytime you stop to draw a breath.

The triggering level (i.e. the sound level at which the VOX starts to operate and turns the transceiver on) is set by the threshold potentiometer, a 5K pot. A second potentiometer, the 2.5K pot in the base circuit of Q2, should be set slightly **below** the point at which the relay operates without audio (i.e. it is possible to activate the VOX unit through amplification of **noise.** This control sets the response point of the VOX unit just above the background noise level so that only sounds such as produced by the human vocal cords are at a sufficient level to start the VOX cycle.), and it will probably not need to be touched once it is set.

Additional operating control, for minute adjustments, should then be made through the 5K "threshold" pot.

Construction of the transistorized VOX unit is not critical, provided one point is remembered. **The unit cannot go inside the transceiver case** since it would pick up stray rf (radio frequency) energy and automatically lock on, or cause feedback in the audio (thereby locking it on). It is advised that the VOX unit be constructed on a small piece of phenolic perforated board (mounting the parts on top and doing the wiring underneath), and then the entire unit be mounted on terminal strips inside a suitable LMB chassis box. The chassis box can be mounted on the outside of the transceiver or under the dash of the car, and a mike jack for the neck-hung mike or throat mike mounted directly on the LMB box for quick connect-disconnect.

CONTROL

Keep in mind that Part 95 (19) regulations require that we maintain control over our transmitters at all times. This means that you must never forget and leave the VOX operated mike loose in the car, with the transceiver turned on, where others (such as small children) might also be about. Their normal talking, if near or in the car, could easily activate the VOX unit and the transmitter would broadcast everything they have to say; some of which might not be to your liking, or the FCC's!

With the VOX unit installed, you may find it is not feasible to operate your normal AM radio in the car at the level you are accustomed to.

You may have to experiment with both the threshold level **and** the microphone to find a combination that reacts only to your voice and not every passing train or thundering exhaust of a truck.

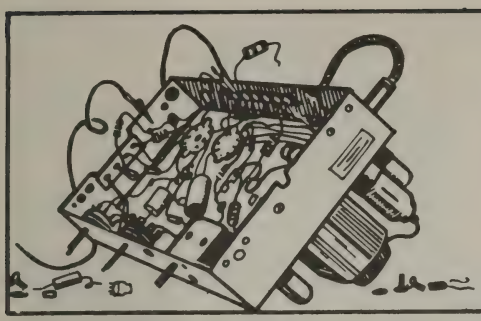
Base units will probably have fewer of these problems, and here again, choosing the proper microphone for VOX operation is just as important as the VOX unit itself.

AS/P VISIT — continued

gency squad these units are important because of their special usefulness in powering two-way radio equipment a well as lights, pumps and power tools. The Zeus alternator produces pure sine wave power without the use of brushes. Consequently, there is no interference to radio reception caused by the operation of this portable power plant.

Throughout our visit to Antenna Specialists we saw evidence of the company philosophy, HIA, being practiced. "HIA" stands for Honesty, Integrity and Ability. And from the president's office right down every assembly line we seemed to detect these qualities of character in the men and women who build and sell the antennas with the "Stripes of Quality."

Our thanks to **The Antenna Specialists Co., 12435 Euclid Ave., Cleveland 6, Ohio,** for enabling us to give you a brief look at what goes on inside one of the young giants of CB manufacturing.



TECH TIPS

FOR CB'ers

STAINLESS STEEL 'NO-HOLE' MOBILE MOUNTS

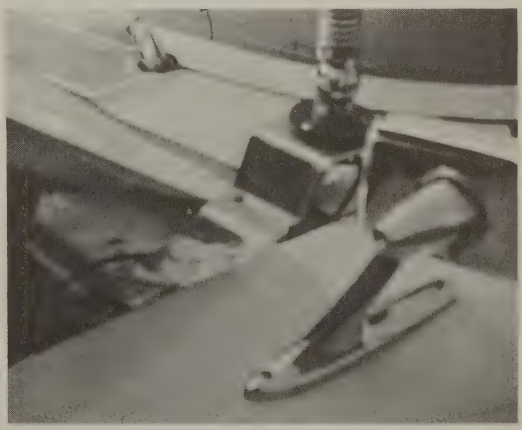
I read the very interesting article entitled "About Mobile Antennas" in the November issue of CBH.

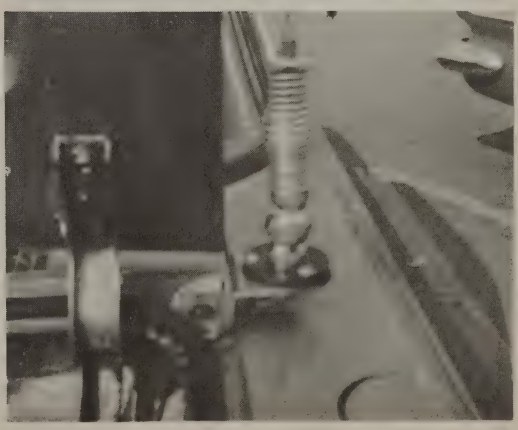
I have developed a very simple method of mounting mobile antennas to vehicles which I believe should prove interesting to others, in as much as it is quick and requires no externally objectionable holes in the vehicle body.

The mounts are constructed from stainless steel, doubled over and about ½ inch of material is lapped over the rough edge to give two smoothed rounded edges. The stainless steel varies from .032 to .064 for rigidity. Not owning a "brake" I used the steel top of my table saw and a large angle iron, with C clamps, to hold the work while bending. To work stainless steel, a very-very slow drill press is needed to drill and cut all holes. I use a Skil Sabre Saw with a ferrous cutting blade to saw the piece after it has been formed.

All rough edges are ground on a grinding wheel. All holes should be drilled **after** all bends are made.

The mount is given a mirror finish with steel wool, soap and water, after





completion. One body bolt or screw, under the car hood (see photos) is usually adequate for a durable mounting.

All of the antennas I have mounted use a top load and all have proven very satisfactory for transmission and reception.

John E. Cook, 8Q 1469
P.O. Box 50
N. Little Rock, Ark.

IMPROVED GW-10 NOISE LIMITING

I have converted a Heathkit GW-10 for improved noise limiting and noticed in the September issue of **CB Horizons** that another CB'er also gave this subject some treatment.

You will notice that the existing low-resistance direct connection from the output of the 2nd i.f. transformer is retained to the plate of the diode and that other elements of the circuit are inverted in order to keep the detector forward-resistance low and yet use the improved Makino limiter. From my notes I took during the modification, the following steps with any GW-10 should measurably improve the set's noise handling ability.

( ) Unsolder and remove all' connections at lugs 1,6,7 and at the center post of tube socket V3.

( ) Unsolder and remove all connections at Lug 4 of 2nd i.f. transformer.

( ) Unsolder and remove all connections at Lugs 1,2,3 and 4 of terminal strip M.

( ) One end of a piece of hook-up wire is connected to Lug 4 of terminal strip L; connect the other end to Lug 4 of the 2nd i.f. transformer. Do not solder.

( ) One end of a one megohm resistor is connected to Lug 1 of terminal strip L; connect the other end to Lug 4 of the 2nd i.f. transformer. Do not solder.

( ) Connect one end of a .05 mfd condenser to Lug 4 of the 2nd i.f. transformer (do not solder). Connect the other end to the center post of tube socket V3 (do not solder).

( ) Connect one end of a 33K ohm resistor to Lug 4 of the 2nd i.f. transformer (S-4). Connect the other end to Lug 7 of tube socket V3 (do not solder).

( ) Connect one end of a 33K ohm resistor to Lug 7 of tube socket V3 (S-2). Connect the other end to Lug 3 of terminal strip M (do not solder).

( ) Connect one end of a 10K ohm resistor to Lug 1 of tube socket V3. Connect the other end to Lug 3 of terminal strip M (do not solder).

( ) Connect one end of 470K ohm resistor to Lug 3 of terminal strip M. Connect the other end to the center post of tube socket V3 (do not solder).

( ) Connect one end of a 100 mmfd capacitor to Lug 3 of terminal strip M (S-4). Connect the other end to the center post of tube socket V3 (do not solder).

( ) Re-connect the bare wire from pin 3 to the center post of V3 (do not solder).

( ) Connect one end of a 100 mmfd capacitor to Lug 1 of tube socket V3 (S-2). Connect the other end to the center post of tube socket V3 (do not

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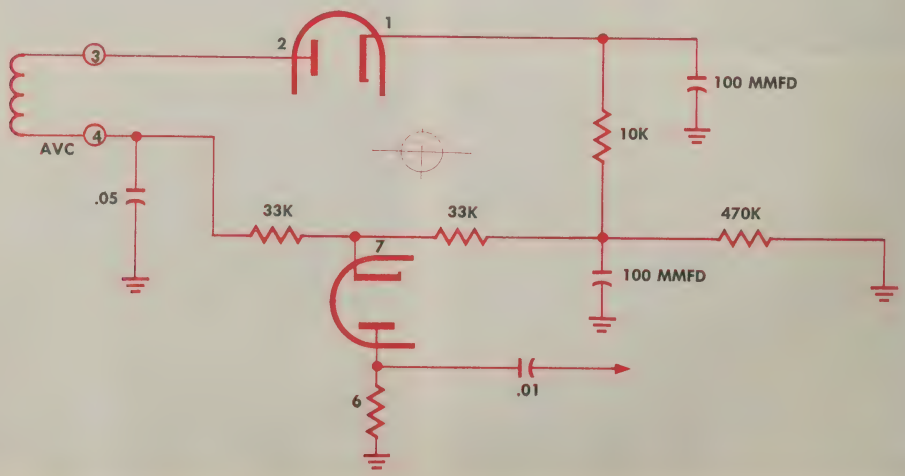
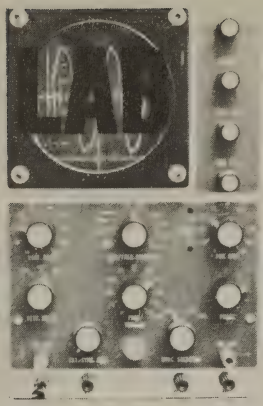




REPORTS

OF PRODUCTS TESTED BY OUR ENGINEERS

ELECTRONIC WHOLESALERS BIG "E"

One of the lower priced but more feature-laden transceivers we have had the opportunity to evaluate in the **CB Horizons** Lab of late is the **Electronic Wholesalers Big "E"** 11 channel transmit, 23 channel receive unit.

Electronic Wholesalers is one of the biggest chain of electronic equipment outlets in the southeastern U.S.A.

Their home office (**2345 Sherman Avenue N.W., Washington, D.C.**) was gracious enough to supply a factory fresh unit for us to evaluate.

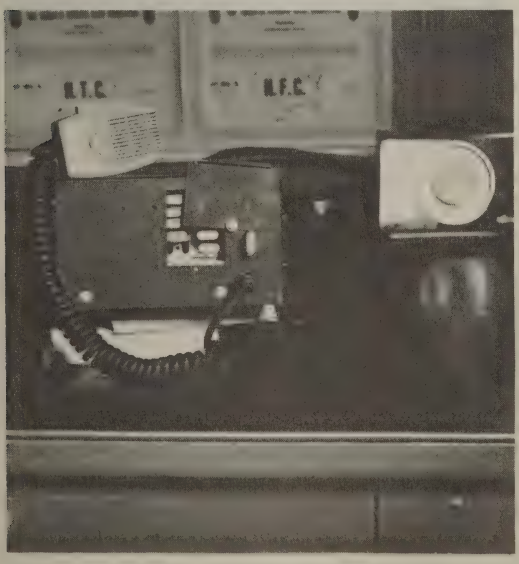
It's unusual for our reviewing staff to mention the unit's price so early, but we have good reason here. **$119.95.**

For this the buyer gets a 23 channel receiver, tuneable naturally; 11 channel transmit (plus a 12th transmit position on an external crystal socket); a combination S and RF meter for receiver and transmitter respectively; crystal spotting switch to tell you exactly where your transmit crystal is on your receiver; squelch; dual conversion receiver with good selectivity; push to talk mike and three way 6 or 12 vdc and 117 vac power supply operation.

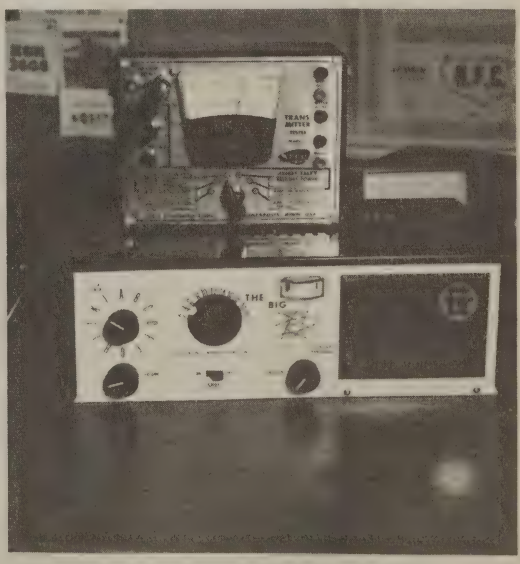
In our lab evaluation we found the Big "E" ran 4.91 watts inut (as we unpacked it) and 3.1 watts output.

After a 48 hour **heat test** the unit input had dropped to 4.8 watts and the output to 2.9 watts. We made no attempt to re-tune the unit to a full 5 watts input.

Modulation is particularly good. With 4.91 watts in and 3.1 watts out the Big "E"



BIG E transceiver from Electronic Wholesalers features 23 channel tuneable plus 11 internal (and 1 external) crystal sockets for transmitting.



Cover plate partially removed from Big E shows crystal sockets. External crystal socket (with crystal) is also shown, as is mike plug (with mike inserted).

delivers 100 percent modulation (negative and positive peaks) at an average talking voice 3 inches from the mike. If you raise your voice or "climb into the mike" it is possible to exceed 100 percent modulation. All of this audio comes from a 6AQ5 modulator.

The receiver starts off with a tried a true high-gain pentode, the 6BZ6. A signal of 4/10's of one microvolt provided us with 6 db signal plus noise to noise ratio over the entire band indicating a sensitive set.

At first grasp the tuneable receiver knob gives you a "mechanical feeling" of lack of selectivity. The feeling is all mechanical however as the electrical selectivity of the set is very good. An S9 reading of the set's relatively scotch S meter (approximately 200 microvolts of signal) on channel 9 shows no sign of the signal on channel 11. Channel 10 has some hash, but not bad enough to mess up an S2 or better ignal. In fact, signals slightly off channel (but still within tolerance) may cause you to retune the receiver, such is its selectivity.

The set is handsome in its two tone grey and (accented) red case.

In the suggestion department we did not like the fact that it does not have a pi-network output. If you don't have a reasonably close 50 ohm antenna match (and here we are assuming the output **is close** to 50 ohms) you won't couple all of the transmitter energy to the antenna. And if you should have too high an SWR (such as 4 to 1 or worse) you **might** do damage to the final in the transmitter with no method of canceling the reactance introduced into the tank circuit from the line mis-match.

As shipped we found the receiver read (uniformly) two channels high. By following the instructions packed with the set and adjusting the slug in oscillator coil L2P, we were back on channel in a matter of seconds never to be bothered again.

Again the price: $119.95. We feel this set is an excellent buy.

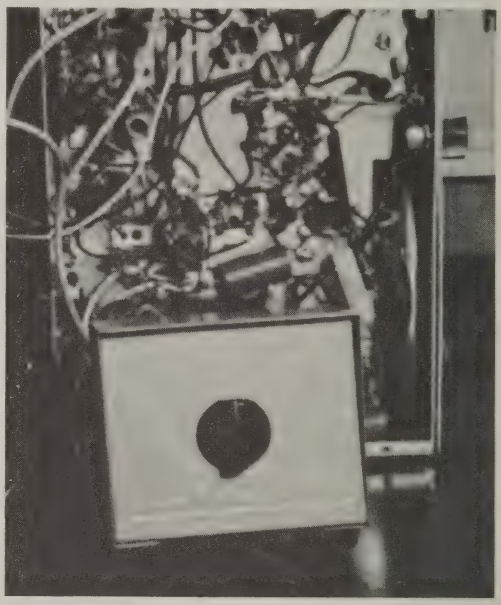
ELENCO SIDEWINDER

Electronic Engineering Company, Wabash, Indiana has been active in the CB field for as long as most of us can remember.

Many thousand CB'ers have been impressed enough with Elenco's Power Gainer audio compression amplifier to want to give the unit a try.

ELENCO's unit is dubbed the Sidewinder, and it attaches into your existing transceiver (in a manner we shall detail shortly) to effectively supress your carrier output (i.e. transmitted signal without any modulation) and at the same time give you good punch in the other fellow's receiver.

The Sidewinder wires into the final output stage of your transmitter, and the modulator. Only two connections are made to the actual transmitter and modulator, one



ELENCO's Sidewinder adapter for suppressed carrier, double sideband transmission as wired into a transceiver in the HP Lab. Unit requires five connections to transceiver, requiring approximately 45 minutes time.

wire to each. Three other leads tie into the filament (heater) circuit of your set for filament power for the sidewinder.

With the sidewinder wired in (it takes all of its power from your transceiver), and switched "in" (on), your output **drops** (under no modulation) from approximately 3 watts (depending on your set) to less than 0.5 watts.

When you modulate (speak) into your microphone, however, the output kicks right back up to the original level, and then a bit more. As long as you keep talking, your

carrier level keeps right up there. If you talk slow, the S meter on the other fellows receiver really bobs about as your signal goes up and down with the modulation.

On the surface, this may seems of little value.

In reality, however, this is a definite step forward for crowded-channel CB operation.

When your output kicks up during modulation, it is the modulation only (sidebands) that is kicking the S meter. Your carrier level stays down around ½ watt or less.

On a crowded channel we found this means your modulation seems to "climb up and over" the interfering signals, but the annoying squeal (heterodyne of two or more carriers on the same channel) usually present on a crowded channel stays in the background.

In a sense this is controlled carrier modulation, except the amount of control on the carrier is considerable and the modulation always exceeds the carrier level by 8 db or more.

Keep in mind this is double sideband, and that there is some carrier present. In fact there is always enough carrier for the receiver to interrogate the carrier for the audio intelligence (modulation) present, and reconvert to audio.

However because it is a double sideband supressed carrier system, the effective range of the transmitter with the Sidewinder attached is not materially increased on a clear channel. A point is reached where the 8 db more-sidebands-than-carrier is perceptible, but at this point (where the signal is very weak, at a distant point) the carrier level is down so far as to no longer allow the standard AM receiver detector to make intelligence out of the signal. A sideband receiver, at this point where the signal is very weak and the carrier is below the noise level but the audio sidebands still above it, would probably make copy possible.

On a crowded channel, however, there were numerous instances during our evaluation of the Sidewinder where we found the Sidewinder-modulated signal was as much as 40% more readable than the normal AM signal.

The Sidewinder has three positions. In the "out" position, the transceiver operates as it would normally. In the "in" position you are transmitting with supressed carrier, double sideband. In the "low" position you are transmitting with approximately 1/6th your normal input power, and this in itself is very handy for close in contacts where the full five watts is not required.

There are a total of five connections to be made inside the transceiver from the Sidewinder. While complete instructions and cabling is supplied by ELENCO, we do not recommend that a brand new-newcomer to CB and electronics attempt the installation without the guidance and advice of a reasonably well-versed technician. The installation is by no means difficult, requiring approximately 45 minutes of time from start to "on-the-air," but it involves connections to both the transmitter final and modulator, which if incorrectly made could be very expensive to repair.

There are no tuning adjustments required with the Sidewinder. You merely wire it in and turn it on. It is either on or off.

You may experience a 3-6 db drop in receiver volume level with the Sidewinder switched in. This is an eventuality that ELENCO has predicted with some sets and they tell you how to cure this if it does occur.

Price of the Sidewinder is $29.50, and it is available direct from the manufacturer or from CB dealers.

The address of ELENCO is simply "ELENCO, Wabash, Indiana."

AGS 200 TRANSCEIVER

Elsewhere in this issue of CBH (see **Man in Washington** — page 9) a report on the importing of Japanese Citizens Band equipment is set forth. In the report the note is made that until this fall, the importing of full-five watt Japanese transceivers has not been heavy.

This Lab Report is the first opportunity we have had to carefully check over the operation of one of these full-five watt imported units.

The AGS-200 transceiver is distributed in the United States and Canada by the **American General Supply Corporation, 11 West 42nd Street, New York 36, New York.**

The unit features five transmitting

Antenna Specialists proudly prese

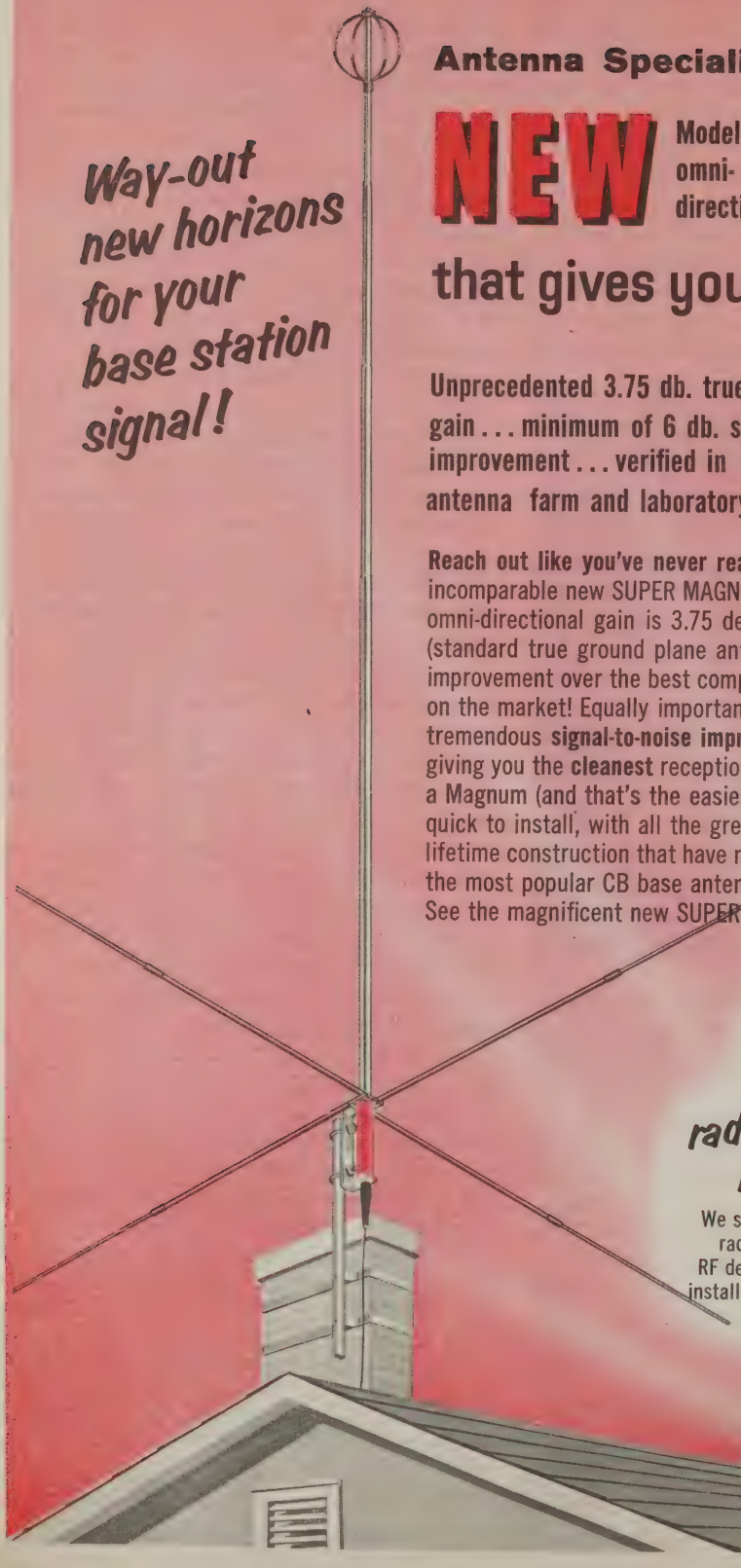
NEW Model M-117 omni-directional SUPE

that gives you at least 10%

Way-out new horizons for your base station signal!

Unprecedented 3.75 db. true omni-directional gain . . . minimum of 6 db. signal-to-noise improvement . . . verified in comparative antenna farm and laboratory measurements!

Reach out like you've never reached before with the incomparable new SUPER MAGNUM Base Antenna! Verified omni-directional gain is 3.75 decibels over reference (standard true ground plane antenna) — an **actual 10.3%** improvement over the best competitive omni antenna on the market! Equally important is the SUPER "MAGGIE'S" tremendous **signal-to-noise improvement of 6-20 db.,** giving you the **cleanest** reception possible as well. Easy as a Magnum (and that's the easiest!) to assemble, quick to install, with all the great quality features and lifetime construction that have made its namesake the most popular CB base antenna in the world **by far.** See the magnificent new SUPER MAGNUM today!



full 1/2-wave "solid state" radials for maximum RF decoupling!

We simply mean **solid** aluminum, 108" radials (four of 'em!) for maximum RF decoupling of radiator, easiest installation — and greatest load bearing.

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new "stati-lite" noise reducer!

Drastically reduces receiver noise by continuous dissipation of static discharge. Exclusive orbital design — no pointed ends to create sparking.

super "Power-Play" transformer!

Super-heavy coil permanently encased in water-proof, rugged plastic housing. Forward power measurement: full five watts. VSWR: a fabulous 1.17 — best by far! Heavier mounting hardware takes masts up to 1½"!

far more rugged construction!

Over twice the contact area at telescope joints (no swaging!) — far stronger. Heavier-gauge seamless tubing than any other brand. Screws on **both** sides for firm electrical connection.

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Complete conversion kit contains four 108" radials; "Stati-lite" Noise Reducer and all hardware.

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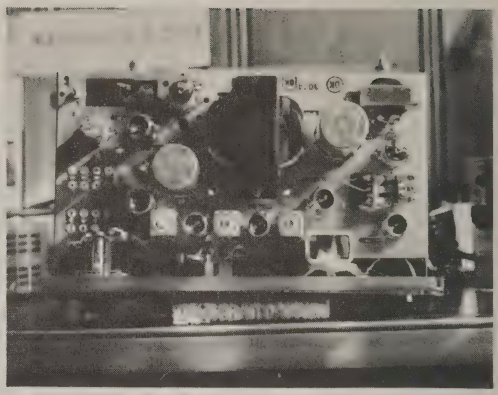
® Stripes of Quality

AGS-200 transceiver has professional front panel appearance including a 4 inch speaker driven by three watts of audio for lots of volume.



AGS-200 transceiver top-side of chassis shows neat layout and good quality workmanship.

channels, five crystal controlled receiving channels, and a full 23 channel tuneable receiver.

The unit also features a dual power supply for 12 (or 6) volts dc and 117 volts ac.

A switchable power and S meter on the front panel and a squelch control round out the front panel decor.

Front panel on-off control of the power uses a toggle switch, an item we haven't seen in quite some time. The antenna connector on the rear is of the standard UHF coaxial PL-259 series. A back-of-chassis wing-nut provides a convenient post for tieing in a ground wire, a good feature so often overlooked in CB transceiver design.

The AGS-200 is a nine tube set. The inside physical layout is clean and neat and we were duly impressed with the rugged construction used throughout. All tubes are common American variety so there should be no problem in finding replacements.

The receiver is a single conversion model with 1.65 megacycles as the i.f. frequency. Two stages of 6BA6 or 6BL8 i.f. amplification are incorporated into the design. The r.f. amplifier is a 6BA6, a pentode with moderately good gain and noise figure at 27 megacycles.

Audio output on the receiver is 3 watts to a husky 4 inch speaker.

The transmitter uses but a single tube, the 6AW8A. The triode section is the oscillator/tripler and it uses third overtone crystals (crystals stamped with the actual CB channel frequency on them). The pentode section is the amplifier.

This type of "single-tube" transmitter arrangement often suffers from low efficiency, resulting in low level output on the order of 2.5 watts. This does **not** seem to be the case with the AGS-200 however as our unit measured 3.1 watts output with 5.0 watts in.

Modulation reports are good, and although the modulator delivers 3 watts or better of audio, we could **not** make the unit overmodulate except by substantially reducing the plate power input to the final amplifier. Modulation limits to 100 percent on the positive side and 90-95 percent of the negative side, well within FCC tolerance.

Of particular note is the rugged cabinet housing the AGS-200. The heavy case is ⅛th inch thick and everything about the set tells you it is rugged mechanically.

At this point it would be well to mention the price, $109.95.

Careful inspection of the handicraft inside the transceiver's case reveals that the same heavy duty construction techniques visible from the transceiver's outside are apparent inside. A sturdy irridited chassis, tube clips to keep the tubes socketed during heavy use, and sealing wax in the i.f. can top-slot adjustments indicate some care has gone into planning this set for extended use with a minimum of maintenance.

Only one design flaw caught our eye. The set's transmit-receive relay, while heavy duty and obviously rugged, **is not enclosed.** The relay is mounted with its contact points horizontal (parallel to the irridited chassis), which will allow dust and moisture to collect on the contact

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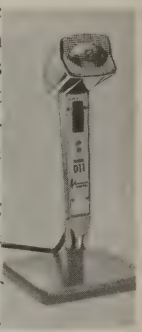
Model B213S Mobile Ceramic Omnidirectional. Today's most handsomely-styled hand microphone wears a rugged, shockproof Implex case that shrugs off abrasions and abuse . . . actually *bounces* when you drop it. Its attractive gold-trimmed gray case encloses a long-life ceramic element which provides the high (-55 db) output knowing CB'ers insist on and offers usable frequency response over a broad 80-9,000 cps. range. Reliable, long-life DPST leaf switch leaves microphone normally shorted, relay normally open. CB Net: only **$10.05.**

Model D501H Mobile Dynamic Omnidirectional. For sheer durability, the D501H has no peer in its price class. To the inherent durability of its dynamic element is added the enduring strength of a die-cast aluminum case and positive cantilever switch action. A scratch-proof neutral gray baked epoxy finish survives, unblemished, the rigors of hard day-to-day mobile use. Outstanding performance features include a 100-10,000 cps. frequency response, high (-55 db) output, and a durable coiled cord (3-conductor, one shielded); DPST switch, microphone normally shorted, relay normally open. High impedance. Only **$20.40**, CB Net, with cord, mounting bracket, hardware.

Model D11H Base Station or Mobile Dynamic. Equally at home on your mobile rig or base station, this outstanding omnidirectional combines versatility, performance, and convenience features that will endear it to any discerning operator. A convenient thumb switch provides press-to-talk and slide-to-lock action with full relay control. Its well-designed components include a damage-defying Thermoform Mylar diaphragm and a sturdy die-cast zinc case finished in rich satin chrome. Its high (-55 db) output level provides maximum modulation and intelligibility. Frequency response: 80-10,000 cps.; high impedance. Long-life DPST leaf switch minimizes field maintenance. Its **$21.60** CB Net includes quick-detach stand adapter and hanger bracket. S905 desk stand (illustrated) costs an additional **$3.30.**



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- 23-Channel Crystal-Controlled Transmit and Receiver Synthesis Circuit . . . All Crystals Supplied!
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- 8 Crystal Receive Positions, 8 Crystal Transmit Positions
- Built-in Selective Call Circuitry and Socket
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- Super Selectivity, Sensitivity and Stability
- 9 Tubes plus 3 Silicon Diodes plus 2 Crystal Diodes for 17 Tube Performance
- Built-in 117V AC Power Supply and 12V DC Mobile Transistorized Power Supply
- With Bracket Handle, Push-to-Talk Ceramic Mike, Transmit and Receive Crystals for Channel 15 plus Crystal for Dual Conversion

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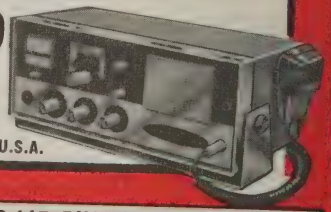
HB-111



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- 23-Channel Crystal-Controlled Receiver & Transmitter—All Crystals Supplied
- Dual Conversion Superhet Receiver Uses 1650 KC and 282 KC IF's for High Selectivity and Sensitivity
- 10 Tubes plus 3 Silicon Power Rectifiers for 17 Tube Performance

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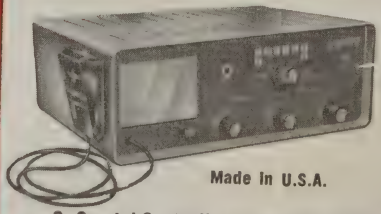

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- 8 Crystal-Controlled Transmit Positions
- Tunable Superheterodyne Receiver Over All 23 Channels
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- With Push-to-Talk Ceramic Microphone, Mounting Bracket, Channel 15 Transmit Crystal

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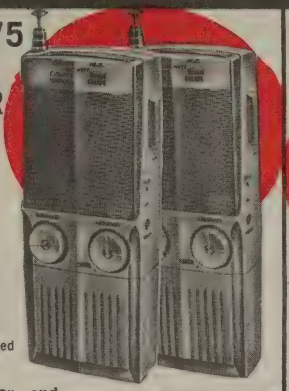

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- Variable Squelch Circuit
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- Uses Powerful Silicon Output Transistors
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- Runs on Penlight cells or Optional Nickel Cadmium Rechargeable Battery Pack
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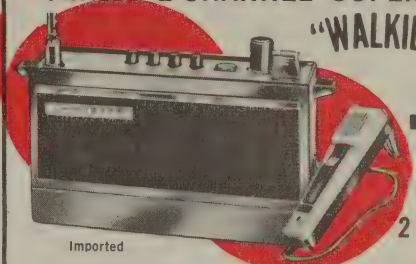

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- Lightweight, Compact . . . Self-Contained with Leather Case and Shoulder Strap
- External Push-to-Talk Dynamic Microphone for Greater Range
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- Powerful 13-Transistor 5 Diode Circuit
- Push-Button Operation
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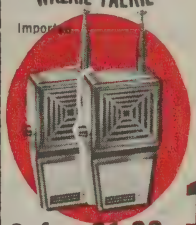

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- Range Up to ¼ Mile
- Effective Super-Regen Circuit
- Completely Wired-Ready to Operate

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NEW! LAFAYETTE
HE-29C 9-TRANSISTOR
CB "WALKIE TALKIE"

25.95

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Imported

- Transmits & Receives up to 1.5 Miles
- Push-To-Talk Operation
- Crystal-Control on Both Transmit & Receive
- 115V to 9V Power Pack Optional At Extra Cost
- Complete with Earphone, Leather Case, Antenna and Penlight Batteries
- No License Required (FCC Reg., Pt. 15)

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"WALKIE TALKIE"
with Noise Squelch

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- Separate Microphone and Speaker for Better Modulation and Increased Range
- Crystal-Controlled Transmit & Receive
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- No License Required (FCC Reg. Pt. 15)

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points. Past experience with early design American sets that used exposed T-R relays suggests that the AGS-200 could be made more serviceable by replacing the open-to-the-elements relay with one that is dust and moisture proof.

With all of the features in this set, and its low price, it appears the AGS-200 does an excellent job of representing the best the Japanese electronic industry has to offer.

For added information write or call **Newman Brothers, 928 S. River Avenue, Sunbury, Pennsylvania.**

DEMCO TRAVELIER

Interest in 23 channel transceivers has never been higher. For the road traveler who spends a good deal of his working time away from his home town, the advantages of being able to move around the full 23 to squat where the activity is from town to town are numerous.

The base station operator, meanwhile, has found that as activity increases, the **need** to be able to shift channels to get some relatively uncongested spectrum space becomes **more frequent** and a **greater chore.**

There simply are too many stations going on the air!

The DEMCO Travelier transceiver is a 23 channel unit that offers the advantages of all 23 at a cost that surprises many.

As the Travelier comes, it is a 12 vdc mobile only unit. A matching 117 vac supply quickly converts it to a base station.

The unit is relatively large, (10⅞ x 9¾ x 5 inches), making it more suitable for larger vehicles (with plenty of leg room) or base operation. With the size comes a bit of weight, due mostly to its rugged design.

All 23 channels on transmit show up on a stepped-switch that reads out through a half-moon window on the left hand side of the unit. The switch is continuously rotateable, i.e., it does not stop between 1 and 23, or 23 and 1. You move from 23 back to 1 and start all over again.

The tuneable receiver (there are four fixed-crystal channel available as well) shows up through the right-hand half-moon window. Between the two balanced windows the Travelier has an S meter.

The receiver in the unit we tested showed a tendency to continue the normal warm-up drift of tube-type sets for approximately 12-15 minutes after being first energized. The drift amounts to about 15 kc, upward, or a channel and one-half, although once stabilized it is as solid as anything on the market.

Transmitter modulation is very good, upward and cutting off at about 90-95 percent depending on how hard you hit it.

The transmitter output circuit, however, does not include a pi-network loading control, making loading of the rig to an antenna system not approximating 50 ohms impedance a difficult task.

The tuneable receiver includes a spot-switch which allows you to find the exact position of your transmit channel.

A novel noise amplifier-gated squelch circuit, with a pot adjustment (through the rear apron) for adjusting the degree of noise amplification in this circuit makes the squelch especially positive.

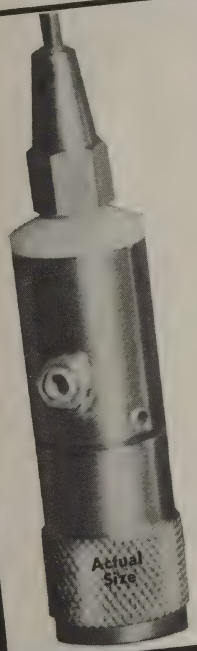
Receiver selectivity is such that signals 42 db or more above the receiver's normal noise level will tend to broaden out the i.f.'s and cause some adjacent channel slop-over. The degree of slop-over seems directly proportionate to the amount of signal present above the 42 db break-over point.

Receiver sensitivity is very good, on the order of 0.1 microvolt for a 6 db signal-to-noise ratio recovery.

Price on the Travelier (12 vdc) is $180.75, equipped for all 23 channels. The manufacturer is DEMCO Electronics, Bristol, Indiana.

ANNOUNCING

NEW IMPROVED VERSION OF THE FAMOUS TOROID-TENNA



Exciting new mobile antenna now locks on to Discourage Theft!

Recently acclaimed by a leading CB publication as **"a superior mobile antenna . . . precision engineered and very nicely manufactured."** Now Electro-Winders, Inc., has engineered a valuable new feature into the popular **Toroid-Tenna,** with **no increase in cost to you!**

This extremely attractive and compact 42" antenna seems to invite theft . . . because it is so good-looking. So we have added a special **Security-Lock** for your protection. Also, a new plastic taper-tip has been added. Of course, the same exciting performance of the exclusive toroid-transformer design is still yours . . . with **Toroid-Tenna!**

$21.95 **ORDER TODAY!**

You owe yourself this extra measure of mobile coverage. Order your Toroid-Tenna today and learn the amazing truth for yourself.

This Symbol (for the Toroid Transformer) represents the first honest to goodness range improvement in CB mobile coverage.

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Enclosed is my check (money order) for $21.95 for a **Toroid-Tenna.** (In California, add 4% sales tax.)

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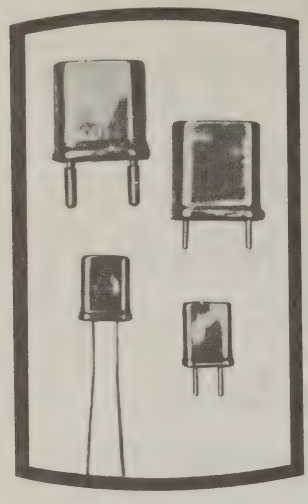
CITIZENS' BAND CRYSTALS



JK CRYSTALS are "HOTTER"

For the finest in CB transmission and reception, turn to the GOLDEN LINE of crystals — the "hotter" crystals that insure "close-on", "stay-on" performance regardless of outside temperature. The GOLDEN LINE is manufactured by crystal experts to rigid standards of activity, stability and calibration tolerance over wide temperature ranges. Each unit is hermetically sealed to preserve these important characteristics.

JK GOLDEN LINE Crystals are specifically made and mated to your set to give you the utmost in service and quality-performance.

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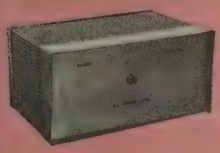

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Transmitter:
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Receiver
- 9 tube superhet circuit with RF stage
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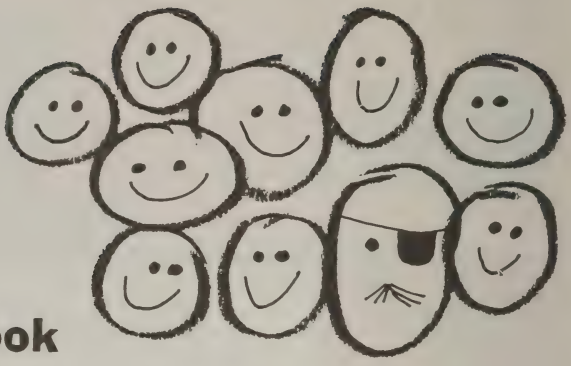
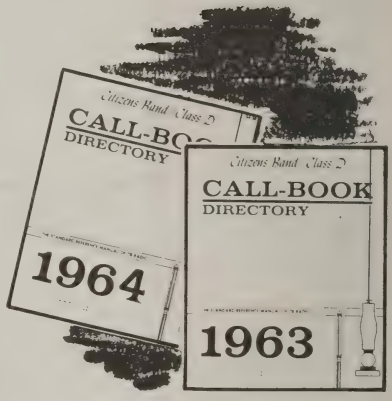
SATELLITE
BASE STATION

9 1/2 out of 10 CB'ers need a CB Call-Book



Whether you use CB for business or pleasure, you'll find the Call-Books extremely useful. For travel, search and rescue work, or routine communications its a great convenience to be able to identify other stations and obtain names and addresses from your own CB Call-Book. Get the 1963 editions now — while they last!

Order your CB Call-Books today! Clip handy order form below . . .



☐ Count me in! Rush my postpaid copy of the **1964 CB Call-Book** (listing CB'ers licensed during last 6 mos. of 1963). **$3.95 Enclosed.**

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THE CB LISTENER

Awards and Certificates for CB DX

QUALIFYING FOR DX-ING AWARDS

Rev. George A. Thayer, CB'er KID2617, of Burnt Cabins, Pennsylvania asks "after reading the CB Listener Column in the September issue I believe I qualify for a number of the awards offered. I have most of the 50 states, Puerto Rico, Virgin Islands, Bahamas, Mexico and South American areas confirmed with CBL's."

The CB Horizons DXing Awards program for **CB Listeners** went into effect on March 10, 1963.

Six initial classifications of awards were established, and they are as follows:

(1) **HTC — Heard Three Continents** — a certificate awarded for showing proof of having heard and collected correct-report cards from a station located on each of the three continental areas, ie. Oceana (Hawaii), North America and South America.

(2) **HITC — Heard in Three Continents** — identical to HTC except in this case your signal must have been heard in the three continental areas and you must have correct report cards from stations that have heard you.

(3) **HFC — Heard Five Countries** — a certificate awarded to CB'ers who submit proper cards indicating they have heard stations, and collected verification cards from them, in five countries. Hawaii, Puerto Rico and Alaska count as separate countries here.

(4) **HIFC — Heard in Five Countries** — awarded to CB'ers who have collected reports on their signal from five different countries. U.S.A. counts as one, as does U.S.A. for HFC award

(5) **HAS — Heard All States** — a tough award granted to CB'ers who have heard stations, and verified their reception with returned CBL cards, in each of the 50 states.

(6) **HIAS — Heard in All States** — the toughest award of all — granted when a CB'er submits proof of having been heard (and having received cards) by stations in each of the 50 states.

There are numerous old-timers on CB who over the months and years have collected sufficient cards to qualify for all of these awards. But the Awards Committee decreed that all awards would be granted only for reception reports dated on or after March 10, 1963. This gives the newcomers an opportunity to start off at a level footing with the old timers. Naturally this meant everyone who had a headstart had to start over in March.

To date five awards have been made, and several are in the application stage.

In the year ahead we expect many more award applications for we feel sure, from our mail, that many CB'ers are vitally interested in this achievement program. Unlike other "cheap and dirty" awards offered in CB, any holder of a **CBH** award knows full well the value of an award that requires long-hard work. It separates the men from the boys!

(Editor's Note: A full description of the CB Awards program as well as a handy check list of CB countries, all states, the 10 - Code, RSFM signal reporting system, and entry spaces for more than 1,400 listening-contacts is available to all CB'ers in the **ACBA Logbook,** price $1.50 postpaid, available from **Horizons.)**

DXING NEWS

KED1586, Aransas Pass, Texas reports an unusual set of stations copied on October 22 when he heard (on channel 15) stations using the call signs BB-0777 and BB-0666. Reception from central and South America was good at the time, 4 PM local.

Another Texas CB'er, Joe Wilson, KED-0530 of Houston, reports hearing CB036, CB046, CB017 and several others identifying as the Canal Zone, in southern Central America.

Chances are the two reports both involve Canal Zone (CB Calls) and Republic of Panama (BB calls) stations. Check the December issue of **CB Horizons**, "CB In The World" report, for addresses of Republic of Panama stations.

The Houston CB'er explains that the GH in the VGH prefix for Bahama Islands stations, stands for Governor's Harbour, the principal location for Americans working on the down-range missile tracking sites. The V comes from the general VP prefix most other Bahama shortwave stations use.

KED1556 says the American's in Governor's Harbor are connected with the Department of the Navy, and that the U.S. has a naval detachment there.

Several souhern U.S.A. reporters tell us that Canadian stations XM41-1055, XM48-137 and XM41-852 around Napanee, Ontario, Canada occupy channel 14 from 2130 to 2300 CST. XM48-137 is George Chalk, Jr., RR 6, Box 435, Napanee, Ontario.

Ronald J. Black, our CBL reporter located on the island of Jamaica in the Caribbean, asks us to forward CBL cards on to stations KGH5022 KEG1935 and KEB1883 which he copied on channel 3 at Cordage in Jamaica. CB Horizons acts as the CB QSL manager for Radio Cordage and others, and cards for station Cordage should be forwarded to the CB Listener for forwarding on to operator Ronald Black.

Ronald received cards from KBG7687 (Hudson, New York), KHH1329 (Saginaw, Michigan), KHC8406 (Bloomington, Illinois) and KHC5089 (Anchorage, Kentucky) this month, through **CB Horizons**. All four stations report the Jamaica island station's signals copied from 12 noon EST to 1530 (3:30 EST). If Ron verifies your reception

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BR-21 Complete with interconnecting co-axial cable and connector, 117 VAC $159.50

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Same prices as above for Amateur 10 and 6 meter band

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City ..... Zone ..... State .....

fellows, we'll have have a Cordage card coming back to you and you'll have another rare country to post on you wall!

Radio Cordage holds down channel 3.

Operator Ron Black reports talking with YV1KR, Venezuela, on channel 3, during September, as well as partial contacts with stations in the Bahamas.

A rare contact and a new country on CB is also reported by Ron. At 10:45 EST on September 21 he copied OAAT, on channel 3, located at Scovavin, deep in the jungles of Peru. The signal from the Peruvian station was loud and clear. Watch channel 3 fellows, this one will be a dandy to log!

Most of Ron's skip reception on channel 3 during the months of September and October came from the 17th, 10th and 9th call districts.

ANOTHER CB AWARD FOR ARNO FELTNER

There should be little argument, at this point, that Arno Feltner, KED0775, New Braunfels, Texas is the champion CB DX listener in the nation today.

Arno, already the proud holder of CB Listener awards H.T.C., H.F.C., is now the proud owner of the first H.I.T.C. (Heard in Three Continents) certificate

Arno submitted proof in the form of heard report cards he had received from YY5HST1015, Caracas, Venezuela; XB3, Guadalajara, Mexico; and KIF0181, Kaneohe, Hawaii.

That's three continental areas Arno has been heard in (and with his H.T.C. award, he has heard), plus five countries he has heard.

Arno has 28 states verified as heard towards his H.A.S. award and is now up to seven countries logged and verified.

Special Honor Roll stickers, attesting that the H.F.C. (Heard Five Countries) has been increased to ten countries, 15 countries, and so on, are planned for those CB'ers who continue to make their country totals climb.

REPORT FROM VENEZUELA

We have all wondered what the current state of CB was in Venezuela. Our South American editor Pedro Seidemann fills us in.

"The CB Band is in very bad shape locally, mostly due to grave misuse of the band for illegal purposes. The first thing the Government did was to put under strict licensing all walkie-talkie units. New permits for CB are also under very severe scrutiny and it was thought that CB might go completely silent here.

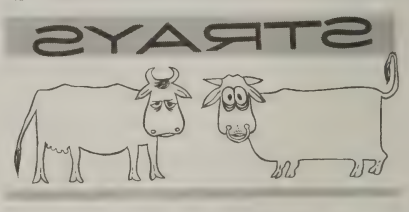
"But this has not happened (yet), and more hobby type communications are on the air again, especially in evenings and on weekends. At the same time business use of CB has grown rapidly particularly in areas of the country where telephone facilities are still shaky at best."

"I have appointed Miss Janice Strange, KDH0958 in Lakeland, Florida as my QSL Manager. I am several hundred cards behind myself and wish that all those U.S.A. stations desiring a piece of Venezuea wall paper to forward their requests to me directly, and Miss Strange will in turn return the cards from me to the sender."

GENERAL LISTENING NOTES

By mid-December CB'ers will notice the frequency of reception and strength of signas from South American stations (in the late afternoon period) dropping off. Between December 15 and January 30, there should be several good evenings of short-skip reception (400 to 1,500 miles) with very loud and clear signals from stations around the states. Most such short-skip reception will occur between 4 PM local standard time and 8 PM local standard time.

Late in December and through January reception from central America and Hawaii should improve, in the late afternoon period from 3 PM local standard time into evening.



MOBILE TRANSMITTER IDENTIFICATION

The FCC has stepped up enforcement of their regulation which requires that all Class D transmitters be tagged with FCC form 452-C, transmitter identification card.

This small form identifies your transmitter as to ownership and call number.

While most manufacturers pack in this form with their transceivers, it appears than many new licensees are **not** tagging their transceivers, mobiles in particular.

An FCC inspector, inspecting your station, will probably cite you if you do not have a form 452-C attached to your mobile unit as well as your base unit.

Form 452-C's are available free-of-charge from any of the Commission's field offices or from the Secretary, Federal Communications Commission, Washington 25, D.C.

Mobile Antennas – Revisited

In an article entitled "About Mobile Antennas" in the November issue of CB Horizons, we said that the "right" length for a quarter wavelength CB antenna is 108 inches. We **should have mentioned**, however, that certain antennas having the conductor embedded in the center of a fiberglas rod can have a "right" length of **less than 108 inches.** The electromagnetic propagation along the antenna is slowed by the dielectric loading of the fiberglas. Consequently, the "experienced electric lengthening" results in a physically shortened antenna. For example, the Columbia Products Style 10-3 mobile antenna is **just 96 inches** long.

On the subject of base-loading versus top and center loading (page 29) we failed to emphasize that **each** technique has certain electrical advantages. In fact, there exists considerable variation of opinion among antenna experts as to which loading method should be considered ideal. It is true, however, that one specific antenna may work especially well in a particular mobile installation.

KEG4948

CB TECH TALK — continued

solder).

( ) The .01 mfd capacitor C9 is already connected to Lug 8 of tube socket V3. Connect the other end to Lug 6 of tube socket V3 (do not solder).

( ) Connect one end of a megohm resistor to Lug 6 of tube socket V3 (S-2). Connect the other end to Lug 2 of terminal strip M (S-1).

Now go back and carefully solder all connections. The schematic shown here represents the final finished product; a GW-10 with a Makino noise limiter that brings improved set performance.

Silvert I. Mysse, Jr.
Ingomar, Montana

NOTE: Readers are invited to submit technical hints and suggestions for publication in this section of CB Horizons. Horizons Publications, Inc. can assume no liability for the application or patent infringements of ideas presented here as this is but a 'technical-forum' for our readers, and an editorial service.

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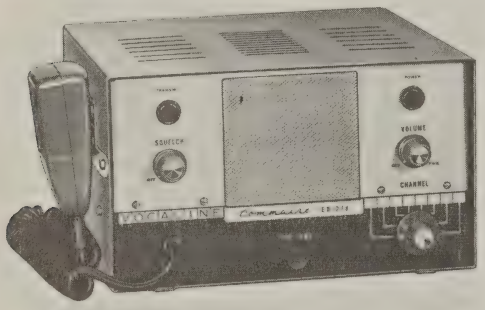
DATELINE - "CB INDUSTRY"

NEW PRODUCTS, SERVICES FOR 2-WAY RADIO

ED-278 FROM VOCALINE

A new CB transceiver, the ED-278, has been announced by the **Vocaline Company, Old Saybrook, Connecticut.**

The ED-278 transmits and receives on 8 channels, and according to the manufacturer, will also operate in the 10 meter amateur band (28.5 to 29.7 megacycles) with the proper crystals.



The transceiver features patented Vocaline squelch circuitry, 100 percent modulation, and a new microphone that keeps background noise to a minimum while boosting the voice of the operator in high-noise locations.

The set has 3.2 watts minimum output, puts out 3 watts of audio on receive and the receiver has a sensitivity of 0.1 microvolt for 10 db signal to noise ratio.

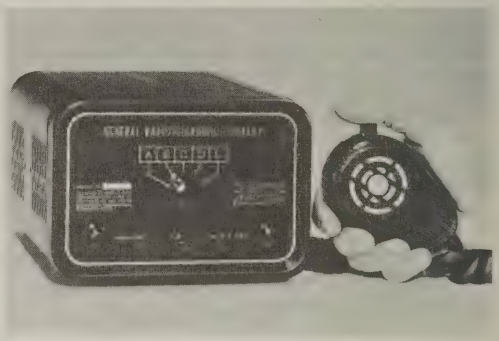
Suggested list price on the new unit is $189.50.

VS-2 BOOMING

General Radiotelephone Company, 3501 West Burbank Blvd., Burbank, California has been so busy shipping their 1963-new VS-2 ruggedized transceiver that they are just getting around to sending out press releases on the unit!

The VS-2 is a five channel ruggedized set that features a number of design characteristics making the set particularly serviceable in mobile installations and other areas where shock and vibration is a problem.

The VS-2 operates from 12 vdc or 117 vac while the VS-3 operates from 6 vdc or 117 vac.



The VS-2 nets for $139.95 including microphone with moisture/shock-proof cartridge, crystals for one channel and the 117 vac power cord.

MARK SIDEWINDER

Deliveries are now being made throughout the country with the new **Mark Products Sidewinder** single-sideband transceiver.

The model SSB-27 CB transceiver opens new channels for CB communications by splitting the existing 23 channels into 46 upper and lower sideband channels.

The SSB approach removes the carrier from the transmissions thereby eliminating the annoying squeals and heterodynes of normal AM operation.

The SSB-27 features a temperature controlled crystal oven for exact on-frequency operation of the transmit and receive crys-

WIN! FREE CB EQUIPMENT IN

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This month *General* is giving away a Model 615 SWR Bridge.

NO BOX TOPS! NO MONEY! NO CONTESTS!

DRAWING RULES: Enter by simply filling out the self-addressed post card below, and mail it to us before January 10th. The winner's name will be drawn, notified by mail, and announced on the inside front cover in General's March ad.

Drawing void in any locality or State where prohibited by law. Federal, State and Local Government regulations apply.

Prize winner will be selected in a random drawing conducted by Stanley R. Rader, Certified Public Accountant. Its decision, with respect to all phases of the drawing, will be final.

Entries limited to residents 18 years of age and older, of the United States and Puerto Rico. Employees and their families, of General Radiotelephone, General Dealers, Stanley R. Rader, Certified Public Accountant, and General Radiotelephone Company's Advertising Agency are not eligible.

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General Radiotelephone's 1963 catalog: complete specifications, technical data and schematics on the Nation's most wanted CB and FM two-way Communications equipment. Fill in and mail the card below.

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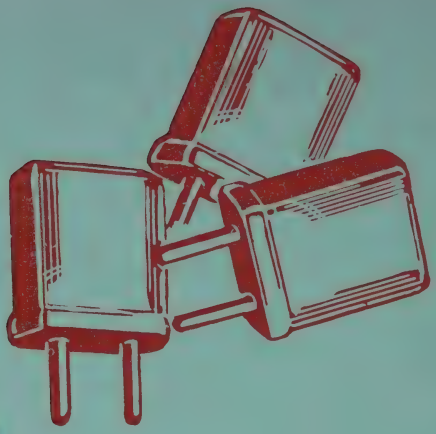

NOW! .003% tolerance crystals at no increase in price. One year warranty. All channels in stock for most makes of C.B. units. Net $2.95 each.

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tals, regardless of the temperature "outside." A four section crystal lattice filter provides single sideband selectivity and results in more useable sensitivity for the single sideband system. Using precision crystals, manufactured to 0.0015% accuracy, frequency stability is 0.0005%.

The Mark SSB-27 transceiver features 10 channel operation (five upper sideband and 5 lower sideband) with crystal turret provided. The unit operates from 11-15 volts dc, and comes equipped for operation on CB channel 3, upper or lower sideband (**Note:** Channel 3 is the unofficial national sideband calling and monitoring channel). CB net price of the dc operation unit is $299.50. An accessory AC power supply is available, model PS-1, for operation from 110-120 volts ac.

Readers interested in knowing more about CB radio's first true single sideband transceiver should write for **Bulletin MP-63, Mark Products, Division of Dynascan Corporation, 1801 W. Belle Plaine Avenue, Chicago, Illinois 60613.**

HA-70 LOW COST WALKIE-TALKIE

Layfayette Radio Electronics, 111 Jericho Turnpike, Syossett, Long Island, New York has introduced a completely wired and tested 3 transistor Walkie-Talkie, model HA-70, for $10.95 each.

The HA-70 Walkie-Talkie is primarily designed for the younger age-group market. Its low price, compact size make it ideal for short range applications. The unit comes with 9 volt battery, telescoping antenna and plastic carrying case.

TUNEABLE ANTENNA FROM NEW-TRONICS

New-Tronics Corporation, 3455 Vega Avenue, Cleveland 13, Ohio has just developed a tuneable mobile CB antenna. The new antenna, designed on a new principle, is basically a copper sheathed fibreglas rod encapsulated in a waterproof plastic sheath. It is built to withstand rugged operation and knocks and bumps from overhead protrusions.

Only 48 inches high, the antenna may be mounted in any convenient location. A new concept of center loading plus the tuneable feature allows the antenna to be tuned across the 23 channels with precision matching on any channel.

Complete information is available from the manufacturer.

JOHNSON SHIELDING KIT

The E. F. Johnson Company folks, **Waseca, Minnesota** have announced a break through in the development of a "universal-type" of automotive shielding kit for noise plagued CB mobiles.

The new kit keeps utility of the auto's basic electrical components and provides suppression of both conducted and radiated noise. The kit, once installed in a vehicle, may be changed to another vehicle. The kit is available for 6 or 8 cylinder vehicles. The "Eliminoise kit" is furnished with detailed, illustrated easy - to - follow instructions; chrome plated spark plug shields, distributor cap shield and coil shield with integral filter capacitor (built in), spark plug cable shielding and all necessary hardwear.

You can pick up your 6 or 8 cylinder kit at your nearest E. F. Johnson distributor or dealer for $29.95 (6 cylinder) or $38.50 (8 cylinder).

VEHICLE CAR TAGS

A new entrant into the CB accessory field is **Columbus Marble Works, P.O. Drawer 791, Columbus, Mississippi.**

Columbus Marble has a neat set of mobile car tags, metal and imprinted with your own call letters, that mount into standard automobile license tag frames.

Several color combinations are available, and all sets are baked enamel. The plates run $2.00 each postpaid. Just tell them what your call letters are and they'll do the rest.

23 POSITION SWITCH-FROM KAVIN

Kavin Engineering Company, 89 West Main Street, Penacook, New Hampshire has announced immediate delivery on their new 23 channel switch that makes virtually any transceiver a 23 channel unit.

The crystal switch mounts external to your transceiver, and you can customize it on top of the set or mount it in an external panel or cabinet.

The unit is available in two models, the CBA for transmit use on tuneable receiver sets. This unit takes crystals with .050 inch pins spaced .486 inches.

Or the Model CBB, which is the same as the CBA except it accepts crystals with .093 inch pins such as the Falcon, Fornaire, Maxwell, Pearce Simpson, Poly Comm and Vocaline.

Model CBA sells for $32.50 and the model CBB nets for $34.75.

Crystals are extra, and are available from Kavin. Write them for a full data sheet on this interesting accessory and watch **CB Horizons** for an early review on the unit.

TE-20A SIGNAL GENERATOR — LAFAYETTE

Lafayette Radio Electronics, 111 Jericho Turnpike, Syosset, Long Island, New York has a nice new low-cost wired and test instrument for those CB service shops (and CB'ers) who have gone too long without an adequate signal generator for aligning CB receivers.

The TE-20A sells for $27.95, and it generates six overlapping ranges of signals that start off at 120 kilocycles and go on right up to 380 megacycles!

A switch gives you a choice of internal modulation of 400 cycles per second or use of any external modulation source.

RF output is in excess of 100,000 microvolts and you have a choice of "low or high level" output.

The unit operates from 105-125 volts ac, 60 cycles.

But suppose there is no one on channel 9 as we enter Fort Worth. We suspect someone must be listening for Fort Worth is a big city and channel 9 is the national calling and monitoring channel.

So here we go.

"This is KEG 2607 from Oklahoma City mobile in Fort Worth, looking for road instructions, over."

A fairly long transmission, but it states as simply as possible our reason to be on the air. And it lets the local Fort Worth boys know we aren't a skip station (which many areas **automatically** ignore — so we had better identify as **local!).**

Chances are we will get an answer. If we don't, wait a few minutes and try again.

Notice we used the word **over** again.

This is highly advisable whenever you are expecting to converse with a station or stations who don't know your operating habits, and whose operating habits you don't know. Some of us pause between words, and too often this is taken as the end of your transmission by a fellow quick with the mike button on the other end. Then you are **both** transmitting (called a double transmission) and you have to start all over again next time around. This results in valuable air time wasted, something we can't afford in the ever more congested Class D frequencies.

How many times have you heard a husband pause on CB, while talking to his wife, only to hear the wife jump in on top of him with her full five watts and start answering!

You've probably guessed to yourself who wears the pants in that family!

MIS-USE OF 10 CODE

The 10 code **apparently** started in police work. We say apparently because we doubt seriously many police dispatchers would take credit for its present use today!

CB'ers are known for their **infamous** use of the 10 code. If you think that is a compliment, go get your dictionary out and look up **infamous.**

Hardly a month goes by that one of the three amateur radio magazines doesn't carry some snide article or letter that **compliments** us on the use of our 10 code.

This doesn't speak very well for us and it certainly doesn't do much for our national image amongst communications minded people in civil defense or the government.

We could do a great deal to improve our lot if we would make better use of the 10 code.

A common mistake is to be redundant with the 10 code. For example, we often hear "what is your 10-20 Charlie?"

What does 10-20 mean?

"What is your location."

Or, used as an answer, it means "My location is . . . . ."

So the phrase "what is your 10-20" is actually you saying "what is your-what is your location?"

A code is supposed to be a practical means of shortening up common everyday questions and answers so as **to consume less air time** in their transmittal, and to make understanding the questions and answers easier when reception is poor.

The proper use of the "10-20" section of the code is simply "Unit 1, 10-20?"

And the answer, "10-20 15th and Harvey."

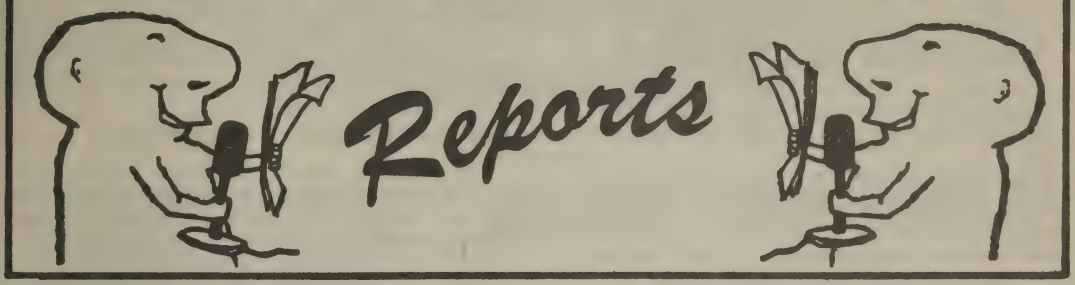
There are many variations of the 10 code available, but most have several 10 signals in common. A few are listed at the end of this article. Unfortunately, merely publishing them here is no guarantee that they will be used properly. That is up to the operator, who must sit himself down and memorize their meanings, and their usage. Once he has them down pat he would no more think of saying "What is your 10-20 Charlie" then he would think of saying "what is your-what is your location, Charlie." Learn what the 10 code stands for, and then you will use it properly. The best place to learn is from a proper listing of the 10 code, such as is found on the inside front cover of the **CB Logbook** (from Horizons' dealers or Horizons) and **not** from the local expert of the airwives. Chances are he learned the 10 code from television detectives who are the master of them all when it comes to asking "What is your 10-20 Charlie?"

COMMONLY USED 10 SIGNALS

10-1 Receiving (you) poorly
10-2 Receiving (you) well
10-4 Affirmative, yes, roger

CONTINUED — Page 62

CITIZENS COMMUNICATIONS



FIRST DISTRICT — KBA/KBB

The Westford Jamboree originally scheduled for September 29th was postponed to October 6, because of torrential rains. As it turned out, luck was with the Westford CB'ers because the 6th turned into the most beautiful day of the season.

The Jamboree was sponsored by the **11 Meter Club of Greater Boston** and management was handled by Jim Analette and Ken Whisple. An estimated crowd of 1,000 complete with mobiles, whips and handi-talkers gathered for the event. Music was furnished appropriately enough by the CB Rounders, a group that knocks it out every morning on AM radio station WHIL in nearby Medford, Mass. Many manufacturers had displays and the door prize, a 3 element beam, was a popular item for conversation.

Noel Gelinas and his wife have returned home from a giant CB Jamboree staged down in Ashville, North Carolina. Noel, KBA 0277, is past president of the **Plymouth County CB'ers of Brockton, Mass.**

At a September meeting of the **S.N.E.C.R.A.**, 1Q 6537, Joe Livesque, was awarded a transistor radio for his part in selling the winning ticket on the Browning CB radio given away by the group during their August outing. New permanent address of the corresponding secretary for this Auburn, Mass. group is "Carol," 140 Washington Street in Auburn.

The **Naugatuck Valley CB News** reports that a letter has been transmitted to the FCC office in Boston seeking FCC approval for a volunteer club-sponsored and operated committee to curtail illegal use of CB in the Waterbury, Connecticut region. According to reports, the acute situation which has resulted in numerous radio violation notices, and many-times as many un-cited violators, has the CB club well concerned for the future of CB in Connecticut.

The same Naugatuck Valley group plans their December meeting for the 18th when new officers of the club will be elected for 1964.

The **Citizens Band Radio Association of Norwalk, Connecticut** reports that one of their members, Flash Engle, KBA 1655, while mobile in South Norwalk spotted a group of townspeople gathered around a prostrate form in the street. A man, bleeding from a bad head wound, was the subject of scrutiny. Flash immediately 10-33'd "Little" Joe Holtz, KBA 0287, who landlined police. The man, in critical condition, was taken to a hospital.

SECOND DISTRICT — KBG/KBI

KBI 3050, Kugel's TV and Appliance store in Tarrytown, performs an unusual service on the side. Base operator Paul Kugel monitors the channel used by the area school buses in case of emergency. He has been called into action in the past when the buses could not reach their base.

The Tri-County Citizens Band Relay Association of Maywood, N. J. held their first post-summer vacation meeting late in September with a good turnout. All CB'ers in the area are invited to attend monthly meetings which are held on the third Wednesday at 8 p.m. in the American Legion #142 Hall on Passaic Street in Maywood.

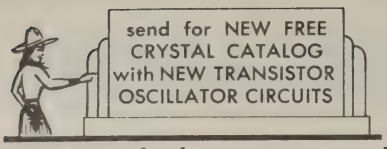
2A 4095, Jack Rappaport of Union, N. J. reports one fresh case of CB radio saving a life. Jack, Union County Citizens Radio Emergency Corps County Director, notes that Ed Rappaport, KBI 0289, while riding on the Garden State Parkway in the Union area witnessed a car go out of control and climb over a barrier into the opposing traffic lane. The driver, thrown from the car, was seriously injured. Ed's radio call for help was picked up by Jack Orlovsky, 2W 3470, Hillside, N. J. who promptly alerted police and medical aid.

The first aid given by Ed's wife and the quick police response has been credited with saving the driver's life according to New Jersey State Police.

If you meet a uniformed man with a patch that reads "Yonkers CB," don't ask him what channel he's on! CB in this case stands for Communications Bureau and the members are **hams!** Everyone wants to be a CB'er these days.

Second district CB operators have been aiding in the search for Joe Bishop, a KBA from Vermont. Bishop is a Radio man of long standing, originally operating as K1-117. He is presently sought for questioning in connection with a youngster's disappearance.

CCM KBI 2504 has a ZIP code message for all. His ZIP code is 10573. If you have news for this column, 10-5 the news to the



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nearest 2nd District CCM for publication.

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A large parade at Rye Town in September saw 2Q 6632, 2A 3905, KBG 0989, KBG 1122 and others aiding the visiting firemen during formation of the line of march. 2W 6363 and 2W 9379 operated a second circuit under their amateur licenses. Dropping in to say hello was KBA 7214.

THIRD DISTRICT — KCC/KCD

The Qui-Co News, published by the **Qui-Co CB Radio League of Lancaster, Labanon, Berks, Montgomery and Chester counties, Pennsylvania** reports the group is selling tickets on a Dewald transceiver to raise money.

Band Spread, published by the **Tri-County Citizens Radio Association, Box 53, Southampton, Pennsylvania** featured a tremendous array of photos and news coverage in their September issue, detailing the **Seacoast CB Radio Club's** apparently very successful Jamboree at Lenape Park. Farthest traveler to the Jamboree was KFG 1312 from Edmonds, Washington. Total attendance, 2,500, really helped boost the population of little May's Landing, where the meet came off.

The Keystone 11 Meter News, of the **Keystone 11 Meter League, Pottstown, Pennsylvania,** reports ". . . It has been quite gratifying to hear channel 7 quiet again. It seems that the CB'ers are monitoring channel 7 and then moving to another channel for their transmissions, this is OK . . . but . . . don't forget to monitor the channel you are moving to, because someone else may already be there!"

FOURTH DISTRICT — KCF

The **REACT** group in **Hagerstown, Maryland** has reformed after Chief Co-ordinator Russ Rhinehart and "followers" resigned during a recent meeting. The original members remained in the team and during their next meeting passed a revised set of By-Laws and had an election with all members present casting a vote for the office holders. Ken Michael, KIC 1265, Bruce Campbell, 4W 2480, Troy Cosner, KCF 1944 and Bob Sowers, KCF 2156 were voted into the positions as Co-ordinators. These four members then elected Troy Cosner to lead their group.

Under member approval the unit was named the **REACT RADIO PATROL** and unofficial uniforms consisting of white short-sleeve shirts with a liquid embroidery printing of the familiar slanted REACT and hand holding mike, were approved. Blue pants with small red stripes add to the overall colors and brought favorable comments from recent jamborees the group attended. CB operators in the Hagerstown region are welcome at any meetings of the group, the second Wednesday of every month, 7:30 PM, in the City Hall Court Room, 4th floor.

At the request of the Maryland State Police, the REACT group assisted with 4 mo-

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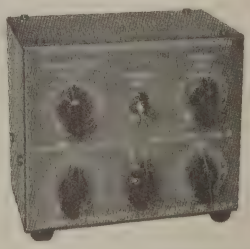

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biles and 2 hand held units when word was received that a local citizen (not a CB'er!) had leaped into the Potomac River with apparent thoughts of suicide. After two hours of combined effort on the part of all members of the REACT team, the body was located under water within jumping distance of the fishing pier. The Hagerstown REACT group plans to be incorporated shortly.

(Editor's note: Readers in the fourth district (KCF) please note that we have a new CCM this month. Send your reports along to **Ken Michael, KIC 1265, 6 North Main in Keedysville, Maryland.)**

FIFTH DISTRICT — KCI

After months of work and much effort on the part of Albert McKnight, club Prexy, the **Roanoke Valley Citizens Band Radio Club** is now incorporated.

The subject of establishing a club, and the pro's and con's of getting an Inc. tacked onto your name is discussed in this issue of CBH starting on page 14.

SIXTH DISTRICT — KDB

The **Northeast Georgia Citizens Band Radio Club** recently staged an emergency civil defense drill during which all of Habersham County in Northeast Georgia was involved. Units were dispatched to guide doctors and various other emergency personnel thru the traffic of downtown Cornelia. The drill proved 100 percent successful and it displayed the coordination that cooperation between the many CB units throughout Northeast Georgia can achieve.

The Tube Poppers Citizen Band Radio Emergency Communications Service, along with members of the **Hart County CB Radio Club,** recently participated in a search for an escaped convict. Units were rapidly given areas to cover by search directors. The convict managed to elude the two CB clubs and the combined efforts of the Sheriff's department's of 3 counties, but all agreed that the experience was very much worthwhile for future developments along the search line. Oscar Herndon is the President of the Hart County Club and Terrell Brown, KDD 1160 is the leader of the Tube Poppers group.

Members of the **CEE BANDERS Radio Phone Club, Birmingham, Alabama; the Bessemer Channel Four Breakers;** and the **Birmingham Communications and Emergency Unit** will be heading up a program of aiding the Sabin Oral Vaccine program during December and January. Channels to be used include 4, 9, 19 and 21, and the program will be in effect on Sundays, December 8, January 12 and 19. All CB'ers in the area are urged to keep these channels clear for this most worthwhile effort during these periods. Our thanks to Jean Liles, KDB 3389, for this item.

The **Memphis Radio Citizens Band Club** news sheet reports the winner of a **50 foot** Rohn tower, 100 feet of RG-8/u cable, and a colinear, given away at a recent barbeque was . . . now you don't think **we** are going to reveal who has a 50 foot tower in the air **. . . did you?**

SEVENTH DISTRICT — KDH/KDI

National REACT Headquarters in Chicago has appointed KDI 0480 the State Director of REACT in Florida. KDI 0480, Nachman, answered the call with a statement. "I don't care if they belong to REACT or not, all I'm trying to do is get all CB units in Florida together so if an emergency comes along, we won't be caught with our pants down. We must be able to coordinate all of our communications as swiftly and accurately as possible."

Congratulations to the **Broward Citizens Radio Club** paper for their series on "Know your Part 19." This club puts out an especially informative paper, and while we don't usually cater to jokes we see in **most** papers, this one apparently has an original gag writer at work thinking up funny space fillers. Two examples, if you will bear with me (or should it be "bare" with me?):

Heard on Channel 4. **"7W0000 unit 2 to unit 1 . . . Here's unit 1, go ahead . . . Hello Sarah, what are you making for dinner? . . . Poison I'm making . . ."**

To which Unit 2 responds **"Make only one portion, I'm not coming home."**

Or, **"7W3659 says the divorce rate in his town is so high that his store handles a line of Drip Dry Wedding Gowns!"**

Back to business.

EIGHTH DISTRICT — KEA

A small four year old girl, missing for eight hours in the vicinity of Jackson, Mississippi, turned up when the **Jackson Citizens Band Radio Club** got on the job. The group found the tot alive and well, and wishing she could "be like Peter Pan and fly back home again."

The same Jackson group possibly scored a first in CB when they volunteered to radio in "box scores" during the first and second district Democratic primaries in Mississippi.

Three base stations were set up at downtown Jackson points and mobile units were dispatched to the various precincts throughout the city. The mobiles called in the returns to the bases as fast as the ballots were counted on the precinct levels and therein aided the mass news media with fast returns.

TENTH DISTRICT — KEG

The **Emergency Communications Organization,** a new CB team in **Texarkana, Texas** has their mail coming in at Box 1771, Texarkana. They stand by on channel 11.

Director in Charge of the group is Ed Jessee Russell. Secretary and Treasurer is Dave Morgan and Advertising Director is none other than Radio Red, KEH 1065.

The group has been formed to help and assist in CD, emergency work, first aid and wherever and whenever good men and communications are needed. They meet at the Stump Cafe, Highway 59, first and third Monday nights at 7:30 PM. At their first meeting the group voted **CB Horizons the Most Helpful Magazine of All,** and their of-

ficial news source. Thanks gang. We'll try to live up to your praise!

The **Citizens Band Radio Operators of Hi-Plains (Texas)** held their first annual picnic and get acquainted party in September at Buffalo Lake near Lubbock. REACT units from Amarillo were among the welcome guests. Many folks brought boats and ski equipment and CB'ers from Lubbock and Olton, Texas attended as well. Plans are to make this an annual affair, according to reporter Bert Fondren, KEG 3491.

In a recent election at Waco, Texas, the **Heart of Texas CB Club** elected a fine slate of officers: Herman Londonberg, KEH 1175 as President, Beverly Hannon, KEH 0401 as Secretary; Sonny Urbantke, KEH 0405 as Vice President and Claude Pierce, KEH 3312 as treasurer. A barbeque is planned for the near future.

The **Midland, Texas CB Club** has been active in entertaining clubs from Big Springs and Odessa and has plans for future events of the same nature.

The **Fort Worth CB Club** and the **Waco CB Club** recently conducted a membership drive for the **ACBA** and came up with a fine representation. The Lake Whitney area units are planning to have as many Central Texas units as can be talked into coming, for a barbeque.

The **Channel 13 CB Club** of **Carswell Air Force Base** conducted a clothing and furniture drive for Goodwill Industries and picked up two and one half van loads!

ELEVENTH DISTRICT — KEJ

The **Kern County Citizens Radio Association** (Bakersfield) now meets at 7:30 PM on the first Friday of each month at the Park Stocksdale Recreation Hall, across from Kern City. All out of town and in town CB'ers are welcome. Their current project is the erection of highway signs leading into Bakersfield stating that channel 9 is the monitoring channel and channel 21 is monitored 24 hours a day for emergency calls. The Kern County Sheriff's Department (11W 8877) operates a CB monitor on channel 21 and has the cooperation of other police and fire agencies in the southern San Joaquin valley county.

Frank Payne, KEJ 6428, reports on an emergency organization in **Anaheim** that is doing a very excellent job. Organezed 7 months ago, the group has been recognized by CD, and the Department of Medical, Health and Disaster in Orange County. Robert Grisotte, 11Q 4874, is Director and he has the full story for interested parties.

The address of the **11-4 Club** has been changed from Perris to **Sunnymead, California** (P.O. Box 278). The club now has 150 members and was a year old last month. Officer in charge at the club is Chuck Walsh, KEJ 7310.

THIRTEENTH DISTRICT — KFF

Over the past month the CB monitor station located in Klamath Falls reports an average of three mobile units, per day go-

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ing up or down highway 99, checking in. Most mobiles come from California, Oregon or Washington. More probably would be checking in if they knew the monitor station was active.

New to CB'ing is the **Klamath Falls Five Watters Emergency Communication Service, Inc.** President of the group is KFF 1046.

In August the group became affiliated with both CD and REACT. A license application has been tendered to the FCC seeking a base and mobile license for EMCOS, the group's emergency communications network.

The two monitor stations operated by the group, KFG 0922 (Pat McIlvain) and KFG 0812 (Fred Metz), now stand by all day long.

A special channel has been set aside in the area for ambulance and doctors. The monitor stations stand by on channel 11, and channels 9 and 15 are back up for EMCOS and REACT operations.

FOURTEENTH DISTRICT — KFI

The **Apple Valley 5 Watt Association** had six mobile visitors from Moses Lake, Washington recently. The Moses Lake group has formed their own club and they call themselves the **"Columbia Basin Channel Masters."**

Paul Hardwick from Seattle was also in attendance. Paul explained about the **WSCBA** and detailed some of the emergencies that the **CB Minutemen** operating from the Seattle area have participated in.

The **Tacoma CB Radio Association** publishes the Tacbra CB News, and Bruce B. McMahan, their editor, does a fine job.

The **CB Minutemen** are due to vote of whether they should raise their club dues or not, soon.

Lloyd Snyder was appointed for the fund raising committee of the Apple Capital 5 Watt Association. The group held a rummage sale October 31 and November 1 and 2.

The **Apple Capital 5 Watt Association** was involved in their first exhaustive search for a lost person September 29th.

Jim Shafer, KFJ 1430 alerted the group that a Bothel, Washington man had been missing over night after stating to friends he was "going right home." 10 units participated in the search which turned out happily when the lost fellow was found "looking over some used trucks he found for sale at a town along the way home." A tiring but beneficial search for the experience all gained.

SEVENTEENTH DISTRICT — KGH

Tekamah, Nebraska CB'ers are standing by on channel 16 now. This is the county seat for Burt County and in the area 21 CB'ers are now licensed and operating.

The **Five County CB Club** held a picnic at Bazine Park, **Bazine, Kansas.** Twenty nine families attended the picnic from Ness, Scott, Lane, Hedgeman and Finney counties. Soft ball was the excitement of the afternoon, followed by a watermelon feast in season!

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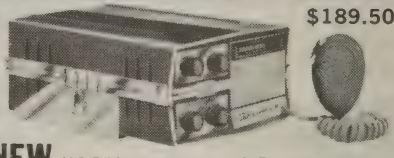

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The **Northeast Iowa Citizens Band Radio Club** holds their regular meetings in the Community Service Building in **Waterloo.** A recent meeting centered around a discussion of new By-Laws for the club. A number of new members have joined recently and visitors from Mason City, Marble Rock, Clarksville and Cedar Rapids are always welcome and in attendance.

The **North Iowa Citizens Band Club** meets in **Mason City.** At a recent meeting 38 members heard Dr. John Dixen, an Optomoligest from Mason City tell about his two month trip to India.

New classes for the group have begun for advanced First Aid, CD and allied arts.

EIGHTEENTH DISTRICT — KHA

The **Kentuckiana Citizen Band Radio Club** membership drive for the **ACBA** has passed the 80 percent mark and they report "complete participation is not very far away."

U.S. Congressman Gene Snyder, also active as KHA 0419 on channel 9, spoke at a recent **KCBC** meeting. The third District Kentucky Congressman is greatly interested in the Part 95 (was Part 19-**Editor**) proceedings in Washington and promised his fellow CB'ers he would keep an eye out at the FCC for them. **Oh — if only more Congressmen were CB'ers!**

The **Citizens Radio Association of Lake County, Waukegan, Illinois,** were asked to participate in an October Sabin Oral Sunday (vaccine) drive. Approximately 30 school locations were covered by the Waukegan group. Mel Harlow, 18Q 7769 was master of controls.

The **Central Illiana CB Club** has been presented with a new set of By-Laws for consideration. The club is seeking to iron out several problems that arise between their elections and dues paying periods.

The **Illini Class "D" Radio Club** news, **Urbana, Illinois** starts off with a strong editorial asking "What about the mess on 11 meters in this area?"

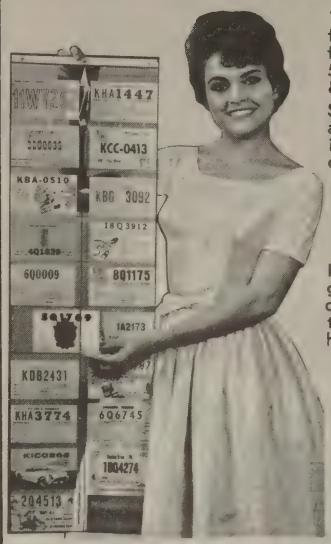
It ends with the sage advice "I suggest that you **break-break** Mr. Webster and find out the definition of courtesy. And then **break** out your Part 95 (was Part 19—**Editor**) and read it very carefully . . ."

NINETEENTH DISTRICT — KHG

The **KYOVA CB Club of Huntington; Portsmouth, Ohio CB Club; Vienna, West Virginia CB Club;** and the **Kanawha Valley Radio Clubs** all welcomed one another at CB ralleys this past season. Mr. Paul Thacker, past President Pro-Tem and Mr. Dick Bromley, past Vice President Pro-Tem of the ACBA were guest speakers at the ralleys which turned out more than 1,000 CB'ers at each gathering.

The **KOVA Club,** which has recently signed up more than 75 members into the **ACBA,** was the recipient of a visit from Ivan H. Loucks, head of the FCC's CB service division, at a recent meeting. At the close of Mr. Loucks' talk on Part 19 (now Part 95—**Editor**), CB'ers shot questions at the expert

New Model CBL Card Packet



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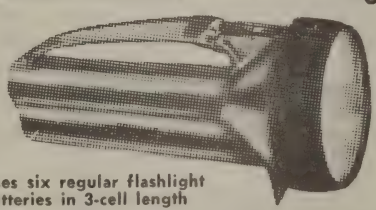

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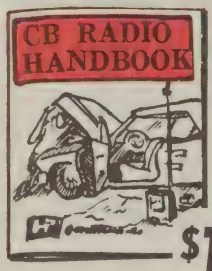

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and a question and answer period followed.

Congratulations to the **Ken-O-Valley CB Radio Club** of **Raceland, Kentucky** and the **Portsmouth, Ohio CB Club** for their new call book of the complete tri-state area.

A motorist traveling three miles east of Parma, Michigan on "i" 94, heading for Chicago, had his engine fail and was stranded with wife and daughter.

After waiting for 20 minutes hoping that a patrol car would happen along, the motorist got out on the shoulder of the road and almost immediately Jim Barnes, CB'er KHG 4842 of Wyandotte, Michigan pulled up. A call into Parma aroused John Gage, KHI 3650 who had the situation well in hand with a tow truck in short order.

The grateful motorist, not a CB'er, may well be one soon judging from a letter he wrote to **CB Horizons** praising the help he received from these radio equipped strangers from Parma, Michigan!

The **Citizens Radiophone Association** news sheet **"Gridleak,"** out of Detroit, brings everyone's attention to House Bill HR 6697, which if passed by Congress will force the FCC to relinquish its so-called rights of taxation in connection with the $8.00 CB license application fee that goes into effect January 1.

All CB'ers are urged to write their respective Congressmen urging **passage** of HR 6697, or **re-introduction** of the bill in the next session of Congress if it is tabled as this sessions winds its way into oblivion.

New officers in the **Ky-Va CB Club** are Dave Hunter, Jr. (KHI 4853), President; Arnold Pritchard (KHA 7488), Vice President; Kelly Desimons (19Q 2189), Secretary and Damon C. Duncan (KHG 5115), Treasurer.

The new President of the group listed six objectives for the new year in his Platform:

(1) Each member to monitor channel 15.
(2) Erect highway signs announcing the channel 15 monitoring program.
(3) A planned program for each meeting.
(4) Establish emergency monitoring programs with the local police, etc.
(5) Educate each member on the proper use of his radio.
(6) To advertise the club and its efforts.

Good luck fellows. The program sounds like a fine one.

TWENTIETH DISTRICT — KIC

Krystal Krackers of **Oneida, New York** have resumed regular meetings with the end of vacation period.. A report on several emergency operations the group assisted with highlighted the first meeting.

Included was a marine unit emergency with the Krystal Krackers aiding the New York State Police and the Coast Guard in a drowning at Lake Oneida. CB Skuba divers from nearby Souquit were among the first to respond to the call for help.

A new unit is now being trained to work

on marine emergency programming for the club.

The **Chili-Ogden-Riga CB Club,** P. O. Box 227, **N. Chili, New York** has elected officers following initial formation of the club. Officers are Alex H. McKay, President; Ted Henry, Vice President; David Beatson, Secretary and Treasurer. The club is active in CD and REACT and has a 100 percent membership drive on for the **ACBA.** They meet on the first Monday of each month.

The Mountain City Citizens Band Radio Association, Box 119, **Hazelton, Pennsylvania** was a very active participant in the recent Sheppton, Pennsylvania coal mine disaster. The club provided a communications network to shuttle in supplies, hand held communications units, and then CB mobile units alerted that certain supplies were needed ran them to the mine scene. This freed state police cars from the arduous task and chalked up a very nice public image of CB's help in this national news story item.

The Modulator, voice of the **Five-Eleven Radio Club, Inc.** of **Pittsburgh, Pennsylvania** reports that their club was the happy recipient of a visit from the famous **ECI** traveling CB laboratory in September. Irwin Sussman, former ECI sales manager was responsible for the visit and the wagon had Mike Heitner, 2Q 1518 (Sales Engineer) and Fred Barry (KBG 2078) at the controls. A fine visit and time were had by all as the Pittsburgh gang learned what a CB Lab was all about!

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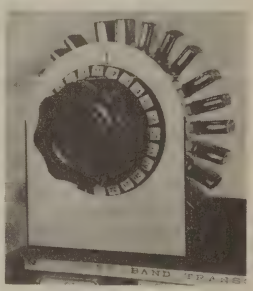

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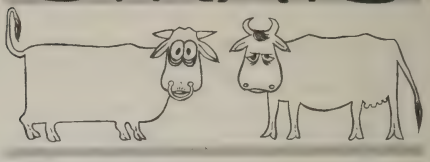
10-6 Operator is unable to talk, busy
10-7 Station or operator out of service
10-8 Station in service
10-9 Repeat message
10-10 Through with channel and subject to call
10-12 Visitors or officials present
10-13 Request road (or weather) information
10-19 Come by this station (or return to base)
10-20 What is your location, or, my location is. . .
10-21 Call by telephone (usually followed by a telephone number)
10-22 Disregard message, transmission
10-23 Stand-by
10-24 HELP (used only in actual emergency)
10-30 Item or operation is contrary to Part 95 rules and regulations
10-33 Need an ambulance (police, fire truck, etc.)
10-36 Confidential information (or, this information cannot be transmitted over the air)
10-37 Identify yourself (by name or FCC assigned call sign)
10-41 I am changing to channel . . ., or, change to channel . . . Example — "10-41 15."
10-50 No calls or messages for you (answer to 10-69)
10-69 Do I have any calls or messages?
10-97 I have arrived at my designation.
10-98 Assignment completed

STRAYS



CITIZENS LICENSING FIGURES UP

The FCC has released the final figures for the month of September, 1963, regarding the number of new licenses granted and/or disposed of during the early autumn month.

At the same time Washington sources pointed at the record week of October 8-15 when more than 5,800 Class D licenses were actually granted and mailed by the Commission.

The September figures released by the Commission are as follows:

ACTIONS		PENDING ACTIONS	
Received	Disposed	Begin	End (September)
25,241	23,508	27,663	29,396

The Commission also released their figures for the "average processing time of correct license applications" for the tnree month period July-September.

Approximate Processing Time		
July	August	September
62	68	63

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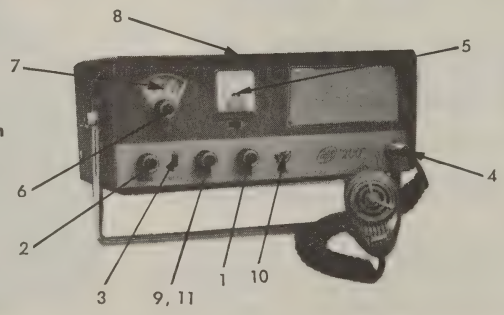

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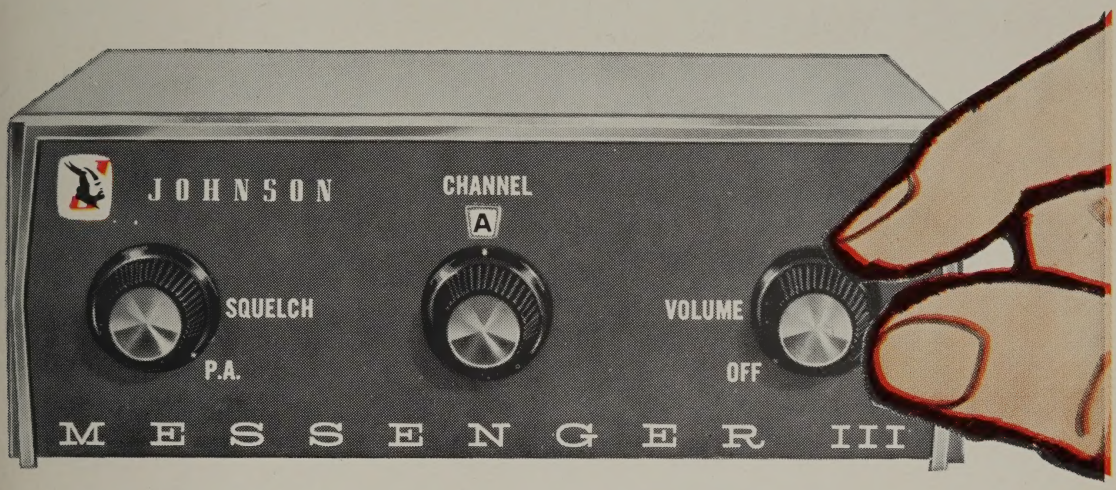

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